

THE DIGITAL DASHBOARD AUDIT



DIGITAL RADIO UK

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EXECUTIVE SUMMARY

Consumers love digital radio in cars, and DAB digital radio is increasingly becoming the norm; 58% of new cars now come with DAB as standard. However, the introduction of connected cars and changes to digital dashboards could affect the ability of drivers to access broadcast radio. Digital Radio UK has conducted a Digital Dashboard Audit to find out if radio is still prominent on dashboards and assess the implications of connectivity on the user experience.

OUR AUDIT FINDS THAT:

- Radio remains prominent on most new cars but we must ensure this remains the case.
- Collaborative actions can be taken to help improve the usability of digital radio.
- Minimising driver distraction is important, particularly for internet radio which can be complex.
- Audio services will be many and varied in connected cars. Broadcast radio must be accessible.

Digital Radio UK is instigating an action plan to ensure a great radio experience on digital dashboards.

THIS ACTION PLAN WILL:

- Improve collaboration between broadcasters and car manufacturers
- Collaborate on specific actions to improve the usability of digital radio
- Focus on minimising driver distraction
- Conduct consumer research on accessing digital radio and audio in connected cars
- Develop an easy to use, hybrid radio experience for new connected car dashboards

INTRODUCTION

People love listening to radio. Strong radio brands which command listener loyalty mean that listening to broadcast radio is as strong as it's ever been. In the UK, 89% of all adults (48 million people) listen to radio each week for an average of over 19 hours¹.

Listening to radio in the car is what we do, it's a natural fit; over 32 million people get in to their cars each week and turn on the radio², and listening to radio in the car accounts for 22% of all listening. Broadcast radio is free, robust, uncomplicated and remains a core requirement for new cars. Quite simply, drivers expect radio to be available and accessible. In recent research conducted by The Radio Advertising Bureau³, one consumer summed up how they felt by saying "radio in the car is as normal as putting on your seatbelt".

DAB digital radio is growing in popularity as it offers the additional benefits of a wider choice of stations and great sound quality. Almost 60% of all new cars in the UK now come with DAB as standard⁴ and Digital Radio UK predicts this will grow to over 90% by 2016. A pan-European minimum standard for radio is established which includes DAB, DAB+ as well as FM, allowing vehicle manufacturers to future-proof broadcast radio in new cars and ensuring drivers can drive across Europe and enjoy all the available stations.

However, digital dashboards and infotainment systems are evolving and internet connectivity is enabling a much wider, and increasingly complex, choice of content and audio in the car. This presents a number of challenges for vehicle manufacturers and the radio industry to ensure that digital radio in the car is easy to find, easy to use, and provides a great app-like experience that consumers will increasingly expect.

As a starting point for addressing these challenges, Digital Radio UK has conducted an audit of new digital dashboards and spoken directly to vehicle manufacturers to understand how radio and audio in connected cars will evolve. Broadcasters and vehicle manufacturers must work collaboratively to develop the great future radio experience on the digital dashboard and ensure that consumers can continue to enjoy great broadcast radio in the car as they do today. We now want to use this report as a platform to start that collaboration.

WHAT WE DID

Our objectives for the audit were to:

- Assess radio's prominence on digital dashboards
- Assess the usability of digital radio
- Assess future plans for radio and connected cars

¹ Rajar, Q3 2014

² Rajar, Q3 2014

³ Audio Now, Sep 2014 <http://www.rab.co.uk/audionow/>

⁴ CAP/SMMT data October 2014

We looked at a wide range of cars from major brands, including the UK's top 10 manufacturers: Ford, Vauxhall, VW, Audi, BMW, Nissan, Mercedes, Peugeot, Toyota and Citroen. Every car had DAB and FM as standard and a colour touchscreen. Some of the models we looked at had the ability to integrate the smartphone with the dashboard and provide a connected car experience. The vehicles were available at a range of prices.

We also spoke directly to product managers in the UK and Europe to establish future plans for radio in the context of connected car strategies. The questions we asked included:

- Is there a radio button on the dashboard or screen? If not, how is radio accessed?
- What are the future plans for radio on the dashboard?
- If so, what is the experience for radio and media?
- How will you provide connectivity and which partners are you working with?

While all the model specific findings and conversations with vehicle manufacturers are confidential this report aims to highlight the overall findings and the actions broadcasters and vehicle manufacturers can take.

FINDINGS AND CONCLUSIONS

1. Assess radio's prominence on the dashboard: Is there a Radio button and is radio easy to find?

Our findings:

- 100% of manufacturers said that broadcast radio would remain part of the dashboard for the foreseeable future
- 70% of the cars we looked at had a "Radio" button either on the dashboard or on the colour touchscreen
- 30% had no "Radio" button. A musical note symbol or "Audio" followed by a media menu including CD, USB, CD and Radio
- 50% of manufacturers said they would continue to have a "Radio" button in the future (next 5 years)
- 50% said they would have a "Radio" button on some models but not on others

Our conclusions:

- **Broadcast radio is not going to disappear from the dashboard**
This is the clear message from vehicle manufacturers. It is likely that other audio sources could be phased out but radio will remain. One car manufacturer said *"CD could be phased out but we have no plans to lose the radio button. It is the one consistent requirement."*
- **Radio is prominent on the majority of dashboards**
Consumers are used to seeing a "Radio" button on the dashboard and it is still there on most models. *"We still think radio is somehow different from other media for our customers and so will remain separate. It is also free."*

- **Radio's prominence is not guaranteed longer-term**

There is evidence that radio's prominence could be eroded and radio could become harder to find for consumers. This is partly due to a greater number of audio sources in the car eg Bluetooth, USB, and also because infotainment systems are being designed with different customer segments in mind. *"A radio button may not be prominent on some models due to analysis of the customer base and their requirements."*

2. Assess the usability of digital radio: Is the user interface simple and intuitive? Can you easily search for and find stations?

Our findings:

- The ease of use varied between cars. Some were very simple and easy to navigate and some were difficult to use
- 40% of cars presented alphabetical lists of all the digital stations available
- 60% of cars required the user to search for stations by selecting the multiplex first
- Re-tuning the radio was either through a single button or required a manual scan through DAB frequency bands. Manual scans were confusing and presented digital in an analogue format
- The terminology used varied between cars. Eg Source or Audio, Scan or Tune
- Implementation of additional features such as service-following was inconsistent

Our conclusions:

- **Broadcasters and manufacturers should collaborate on developing simple user-interfaces for digital radio**

There are many factors that contribute to improving the usability of digital radio in-car. Some are technical, some are design-related, some are the responsibility of broadcasters, some are the responsibility of car manufacturers. A coordinated plan should be developed to address them collaboratively.

- **Presenting available stations in an alphabetical list is the best and easiest way to search**
Consumers simply want to find stations as quickly and easily as possible. This should be by scanning a single alphabetical list of all the stations available in a given area. While we understand why systems have evolved, we believe that consumers do not understand multiplexes and searching by multiplex is confusing.

3. Assess future plans for radio and connected cars: Who will be on the digital dashboard? What is the experience of internet radio and audio? What are the implications for consumers?

Our findings:

- 30% of the cars had a system to integrate the smartphone with the dashboard
- 100% of manufacturers have developed their own proprietary connected system
- 100% of manufacturers are working with Apple on CarPlay, Google on Android Auto, or both
- 50% of manufacturers are working with Mirrorlink

- Internet radio can have up to 8 menu layers to find a station
- Internet radio suffered from poor coverage and buffering
- In connected cars “Radio” will be used to describe audio services that aren’t broadcast radio

Our conclusions:

- **Consumers could find it harder to find broadcast radio**
There will be many different connected systems with different user experiences and different audio services. Some services will also call themselves Radio even though they are not broadcast radio. Consumers need to be able to find and access broadcast radio easily.
- **Internet radio can be complex to use and could cause driver distraction**
Searching through deep menu options is distracting while driving. Minimising driver distraction is already a focus for vehicle manufacturers but more collaboration is required on ensuring this is the case for internet radio.
- **Broadcasters and vehicle manufacturers should develop a new radio experience for digital dashboards**
Poor road coverage and data charges mean that streaming radio over IP will not be for everyone. A hybrid radio experience combining DAB/IP/FM will provide robust broadcast coverage and a simple, app-like radio experience.

THE FIVE-POINT ACTION PLAN FOR BROADCASTERS AND VEHICLE MANUFACTURERS

The following actions will support consumers and ensure a great radio experience on digital dashboards:

1. **Greater collaboration between broadcasters, the vehicle industry and the tech sector on radio’s future in-car:**
 - a. Collaboration at a national level between broadcasters and the vehicle industry. Digital Radio UK will continue working with The Society of Motor Manufacturers and Traders and directly with car manufacturer partners. Government also has a role. As a result of this Audit, Minister of State for Culture and the Digital Economy, Ed Vaizey MP, has announced he will be convening a Digital Dashboard Summit in 2015. The Summit will involve broadcasters, vehicle manufacturers and tech companies and will focus on how radio and audio in connected cars will evolve and how we ensure that the increase in connected car functionality is an addition to, rather than at the expense of, radio.
 - b. Collaboration at a pan-European and international level between representative organisations. World DMB should coordinate discussions between The European Automobile Manufacturers Association (ACEA), The European Broadcasting Union (EBU) and the European Commission.
 - c. Focus on points 2-5 below – Design, Innovation, Research, Communications

- 2. Develop a best practice guide and programme of work to improve the user experience of digital radio:**
- a. Ensuring that broadcast digital radio is prominent and easy to find on the dashboard
 - b. DAB coverage build-out focussing on road networks
 - c. Searching for stations:
 - i. Broadcasters should correctly configure multiplexes and services to make navigation easier
 - ii. Car manufacturers to work towards A-Z station listings
 - d. Easy, one-button retuning
 - e. Consistent terminology. Some common functionality should be consistently named and consistently supplied with the same default settings
 - f. Set-up and explanation of digital radio for consumers. Both broadcasters and automotive should provide consistent information and guides specifically for drivers, including explaining why DAB/DAB+ in some cars has to be navigated differently from domestic radios.
 - g. Implementation of advanced features e.g. service following

3. Ensure that minimising driver distraction is at the heart of all digital radio developments for the dashboard

4. Conduct consumer research on accessing digital radio and audio in connected cars

Currently there are only a small number of cars available with connectivity. This will change in 2015 and we will be able to assess consumer feedback which will inform better design and services. We believe we need to know more about:

- a. How consumer listening habits will be affected
- b. How easy it is for drivers to use connected audio services
- c. What the cost for consumers will be to access audio services and their willingness to pay

5. Develop an easy to use, open standard, hybrid (broadcast/IP) radio experience for new connected car dashboards

Hybrid radio has the potential to provide the best radio experience on digital dashboards. It combines all the good things about broadcast radio with the best things from the internet. Most importantly, it can hide the technology and complexity from the consumer and provide a simple, easy to use radio experience. The technology is available now and broadcasters can make this available to car manufacturers and work together on supporting its introduction in new cars. A demonstration can be seen from UK Radioplayer at the following link:

<https://www.youtube.com/watch?v=ZdtdHFh3NhM>

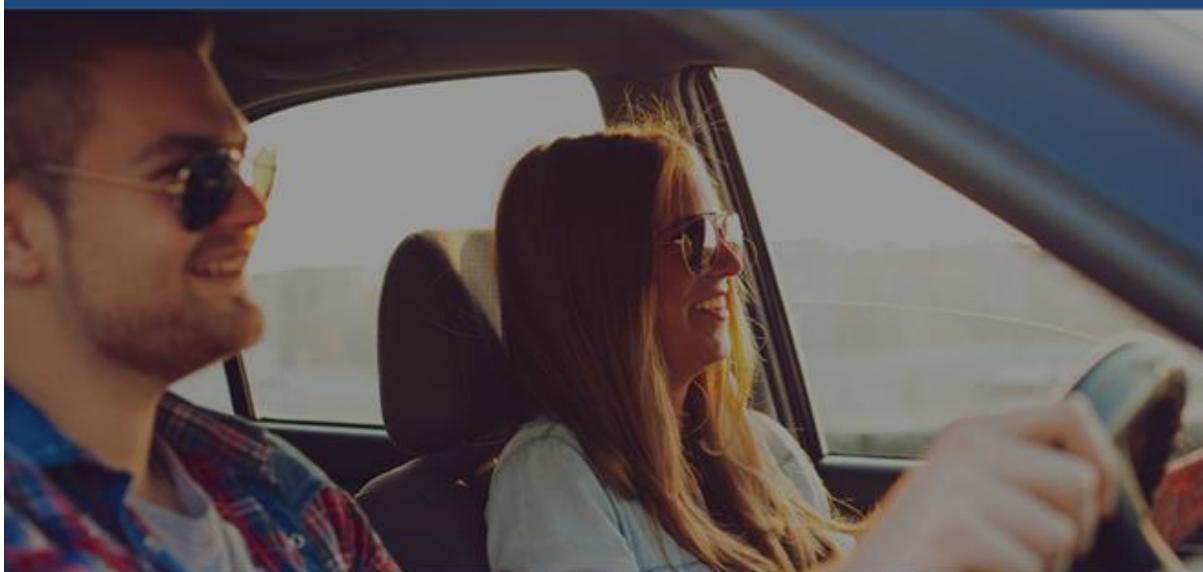
Digital Radio UK will be working with partners on the action plan, and would like to hear from any car manufacturers and other organisations who would like to collaborate on developing great digital radio in cars.

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