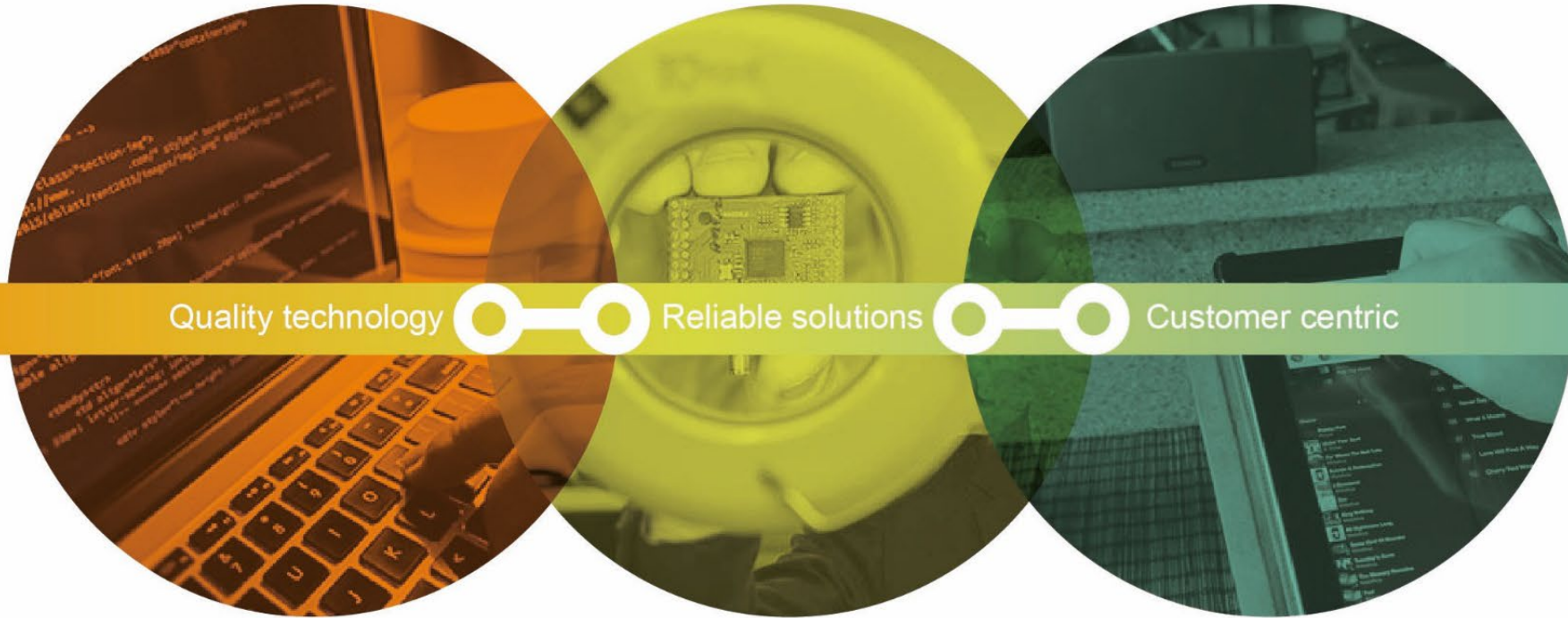


**FRONTIER**  
SMART TECHNOLOGIES



Quality technology

Reliable solutions

Customer centric

**Anthony Sethill**

CEO, Frontier Smart Technologies

# Frontier: #1 technology provider in consumer DAB and Smart Radio

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80%

market share in consumer  
DAB & Smart Radio

17  
years

of heritage in DAB  
technology

45m

units shipped  
to date

SONY PURE PHILIPS DENON Panasonic JBL BOSE Marshall ROBERTS Pioneer sound. vision. soul ONKYO

## Key messages

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- 1 Radio's strength is based on controlling its own platform
- 2 In digital age, broadcasters need to be multiplatform
- 3 DAB is the best place for radio to flourish

## The importance of controlling own platform: case study from TV

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- In March 2002, pay UK DTT service collapsed
  - replaced by Freeview in October 2002
- Created “walled garden” for major broadcasters (in 2002)
  - ~30 channels on Freeview
  - ~200 on satellite and cable
- Broadcasters invested heavily in promoting the platform
- In 2018, nearly 70% of UK households have Freeview

# Smart Radio is the ideal choice for listeners today

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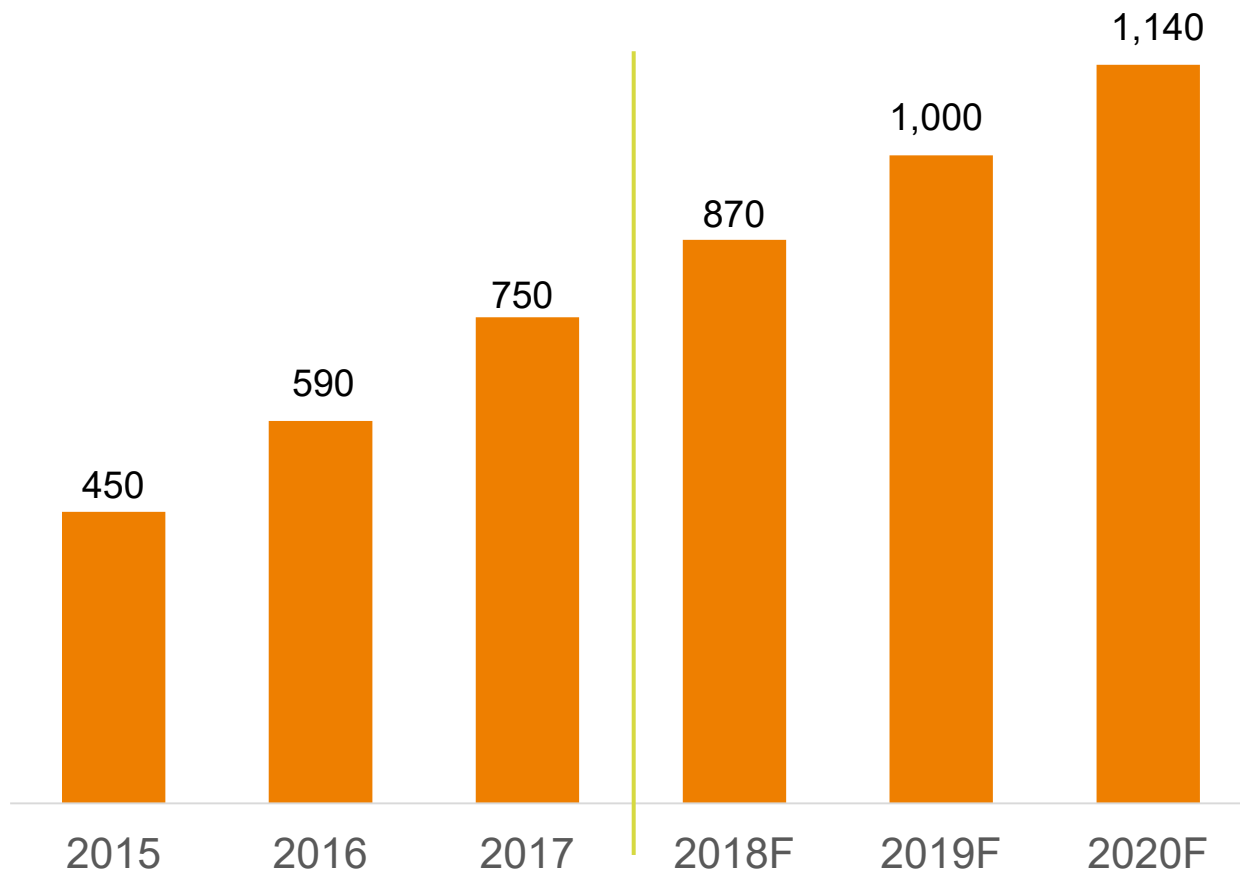


## Smart Radio

- FM / DAB / DAB+
- Bluetooth
- Music services (Spotify, Amazon, etc)
- Internet radio & podcasts

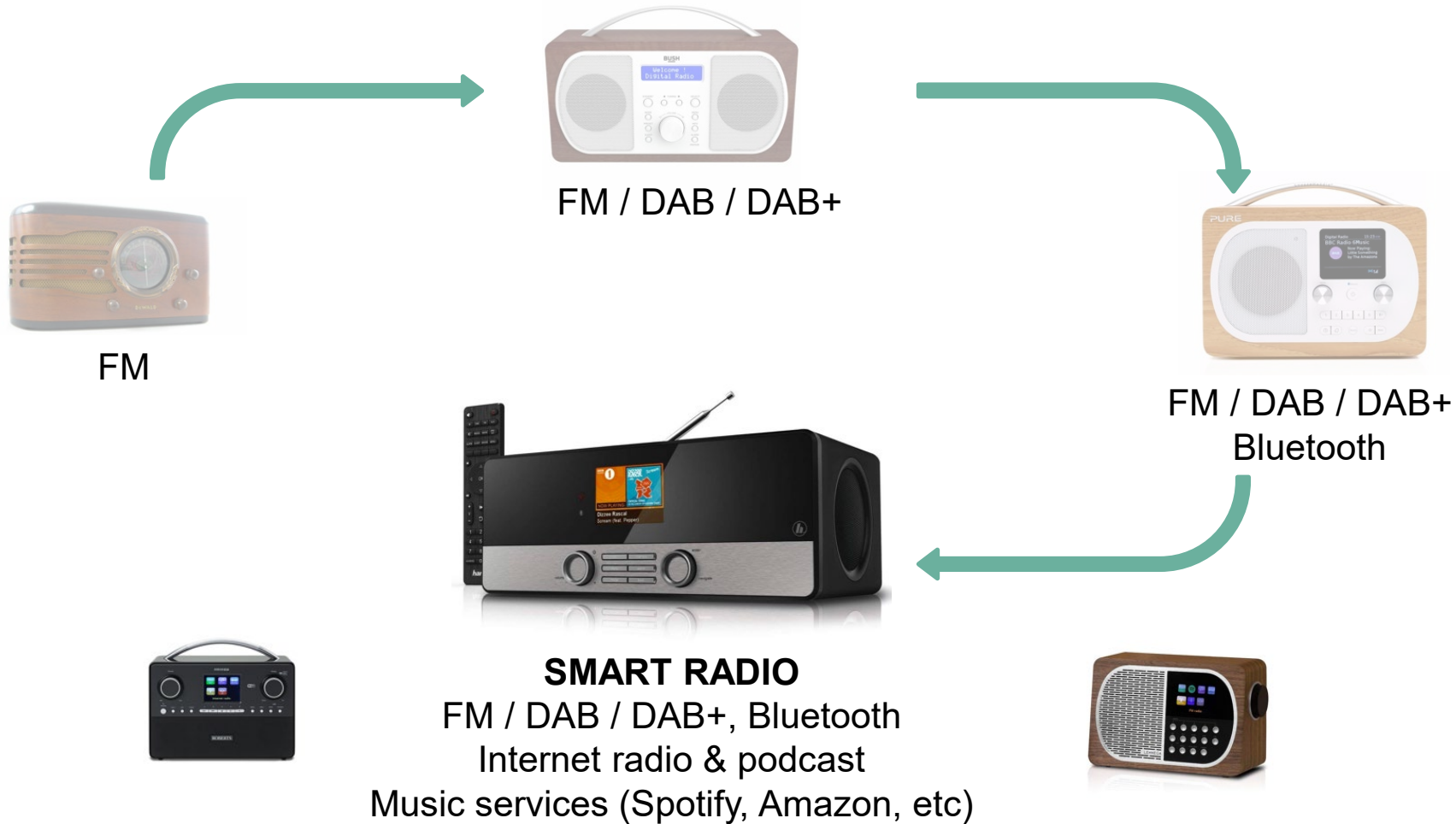
# Smart Radio (DAB+IP) – fastest growing segment of the consumer DAB market

## Smart Radio device annual shipments, thousands



- Smart Radio sales:
  - up 30% a year (2015-17)
  - increase by over 50% in next three years

# Manufacturers need to innovate to keep pace



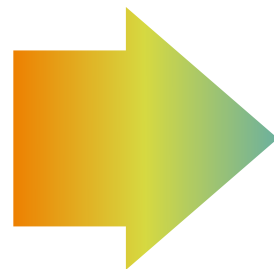
- Devices need to be price competitive
- For some consumers, will need to work with voice assistants

# New technology solutions deliver Smart Radio functionality – at lower cost



Radio 2018

DAB / DAB+ / FM  
Bluetooth



Radio 2020

DAB / DAB+ / FM  
Bluetooth  
Internet radio  
Podcast and Listen-again  
On-demand music  
Color UI  
App control



# Amazon has introduced Connected Speaker API



- A shorter, simpler and common intuitive user experience across all connected end devices
- Access to Amazon Music Service contents via an Alexa devices
- “Works with Alexa” – without hardware re-design

# Latest Smart Radios can be controlled via multiple ecosystems

*Smart speaker with Frontier module inside*



- Smart Radio controlled by any voice-enabled device with
  - Google Assistant
  - Alexa Voice Service or
  - Apple Siri
- First products in-store H1-2019

# Conclusions

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- 1** Audio market is evolving – but important to retain core advantages of radio
- 2** Smart Radio is a significant opportunity for manufacturers – but innovation is key
- 3** Sustained collaboration and promotion will build long term success and create the conditions for DSO

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# Thank you