



Integrating **Digital Radio** into Contemporary Studio Technologies

Aaron Alphonso

Chief Technology Officer
Macquarie Media Limited

ABOUT **MACQUARIE MEDIA LIMITED**

Over 1.8 Million * turn to us each week to hear and contribute to conversations about the issues affecting our world today, the latest sport and the lifestyle topics they are passionate about. Macquarie Media Listeners are 23% more likely to have the ability to spend on extras and are 60% more likely to own investments worth \$300K+ than the average person living in the five metropolitan markets**.

Our News Talk stations are home to Australia's all-time most successful broadcasters. Macquarie Sports Radio is Australia's first National Commercial Sports Radio Network.

We have many innovative and effective ways for advertisers to engage with our valuable listeners across all of our stations and platforms, from custom content opportunities to great sporting environments.



MACQUARIE
MEDIA LIMITED

* Source: GfK Radio Ratings, SMBAP Survey 7 2018, Mon-Sun 5.30am-12MN, Cume (000s), AP10+, MML - 2GB, 3AW, 4BC, FIVEaa, 6PR or Macquarie Sports Radio Sydney, Melbourne or Brisbane.

** Source: Nielsen CMV Metro Survey 8 2018, Mon-Sun 5.30am-12MN, Cume(000s), AP14+, MML - 2GB, 3AW, 4BC, FIVEaa, 6PR or Macquarie Sports Radio Sydney, Melbourne or Brisbane.

Areas Covered



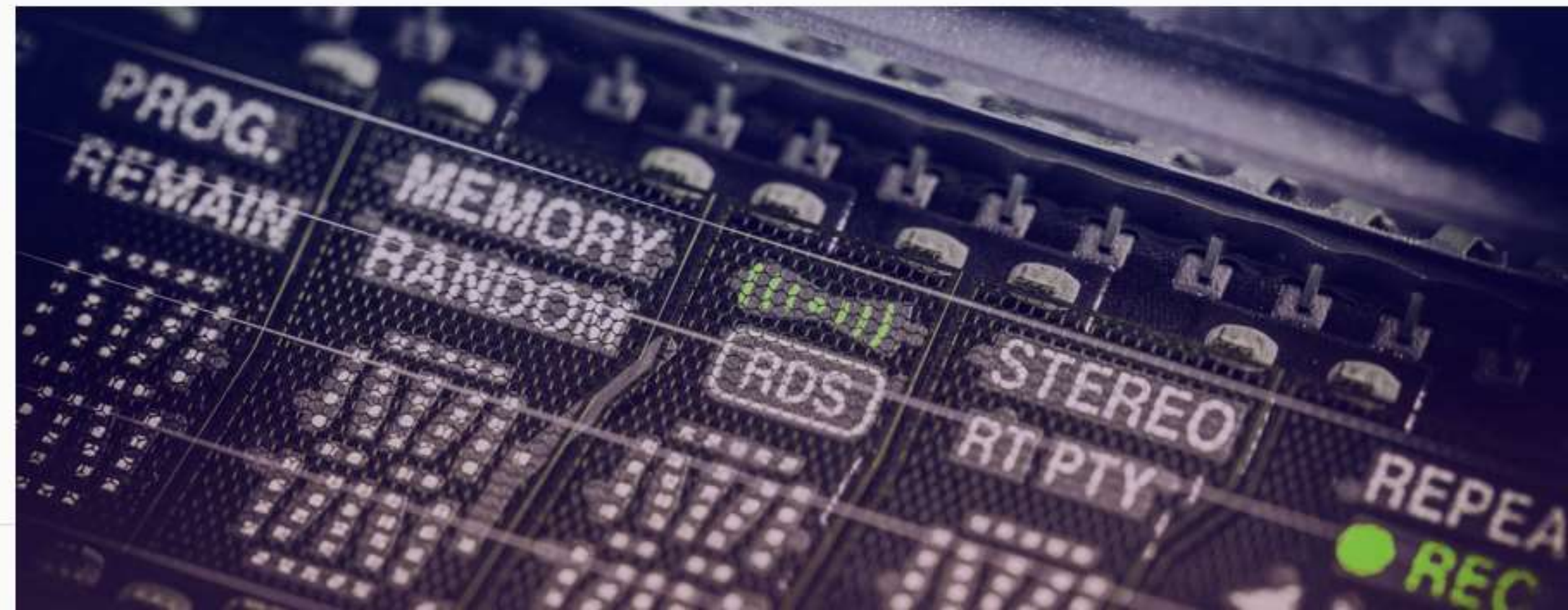
Audio Mixing, Routing and Delegation



Playout Systems



Systems Integration



Audio Mixing, Routing and Delegation



Monitoring and Control API

Select systems with extended support for commonly used protocols / web protocols for monitoring and control of your routing systems



Audio over IP

Audio over IP enables quick deployment of supporting systems such as the ability to very easily generate various audio endpoints for DAB+ Digital Radio, streaming audio, podcast recordings, deeper archival capabilities



Automation

Automation combined with good integration allows for dynamic scheduling of sub-channels, background recording, even content marking and tagging.

Playout Systems


Computer based playout of music, commercial content, and other elements.



Native Export of "billboard" type information

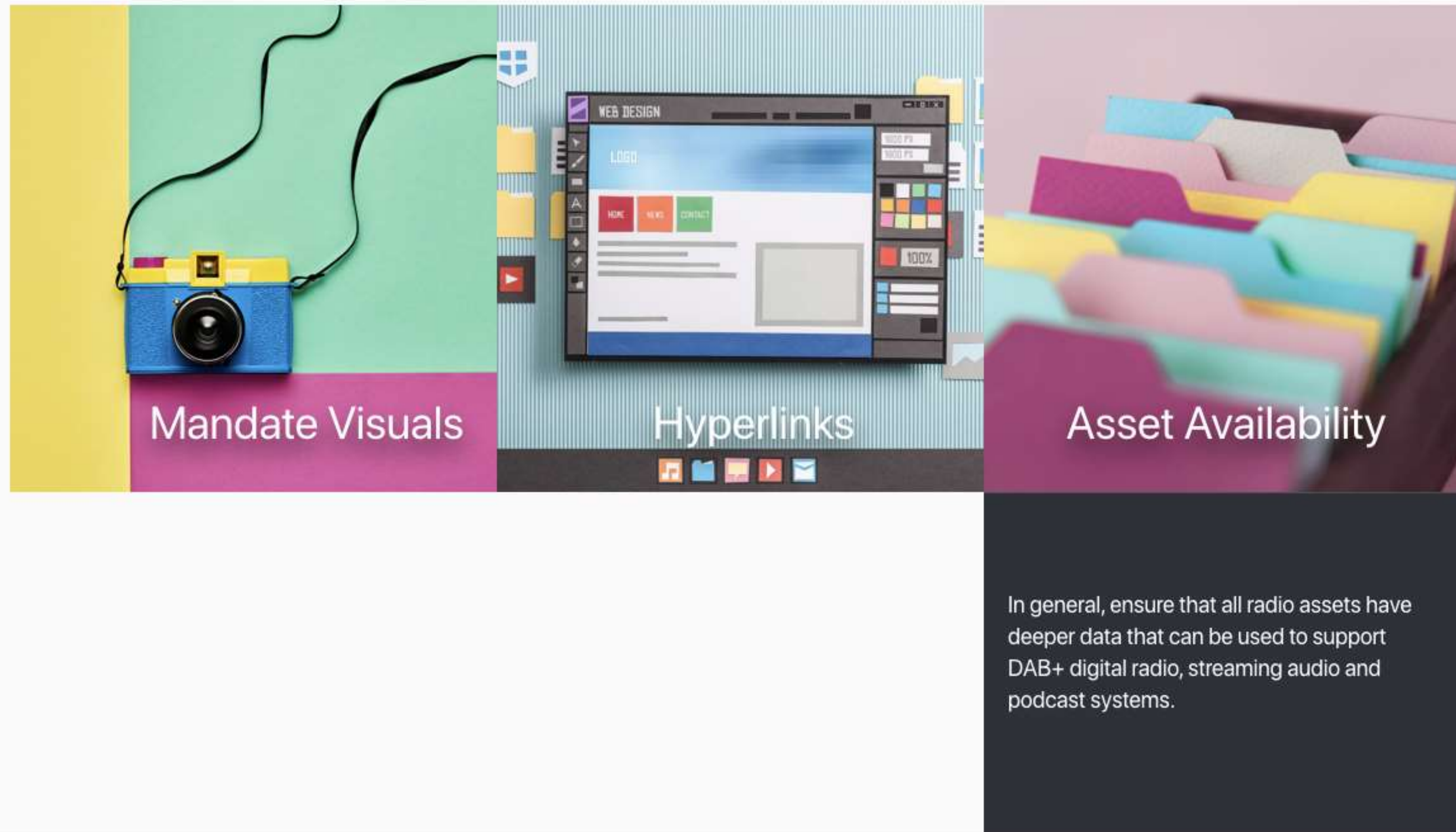


Tagging of Content Types



Extended library management capabilities

Asset Management and Ingest





Systems Integration

DIY Considerations

If using open / web standards and protocols, it is possible to easily develop your own multimedia asset management and scheduling system using readily available web development skills

Premium Managed Service

Another option is to choose a premium managed service or software suite that has the right interfaces to your routing / mixing system, and your playout system, to ensure compatibility across your system.

Overall Considerations



Full IP Infrastructure

A full IP infrastructure eases the rollout of new features, and makes it easy to trial new features that involve audio.



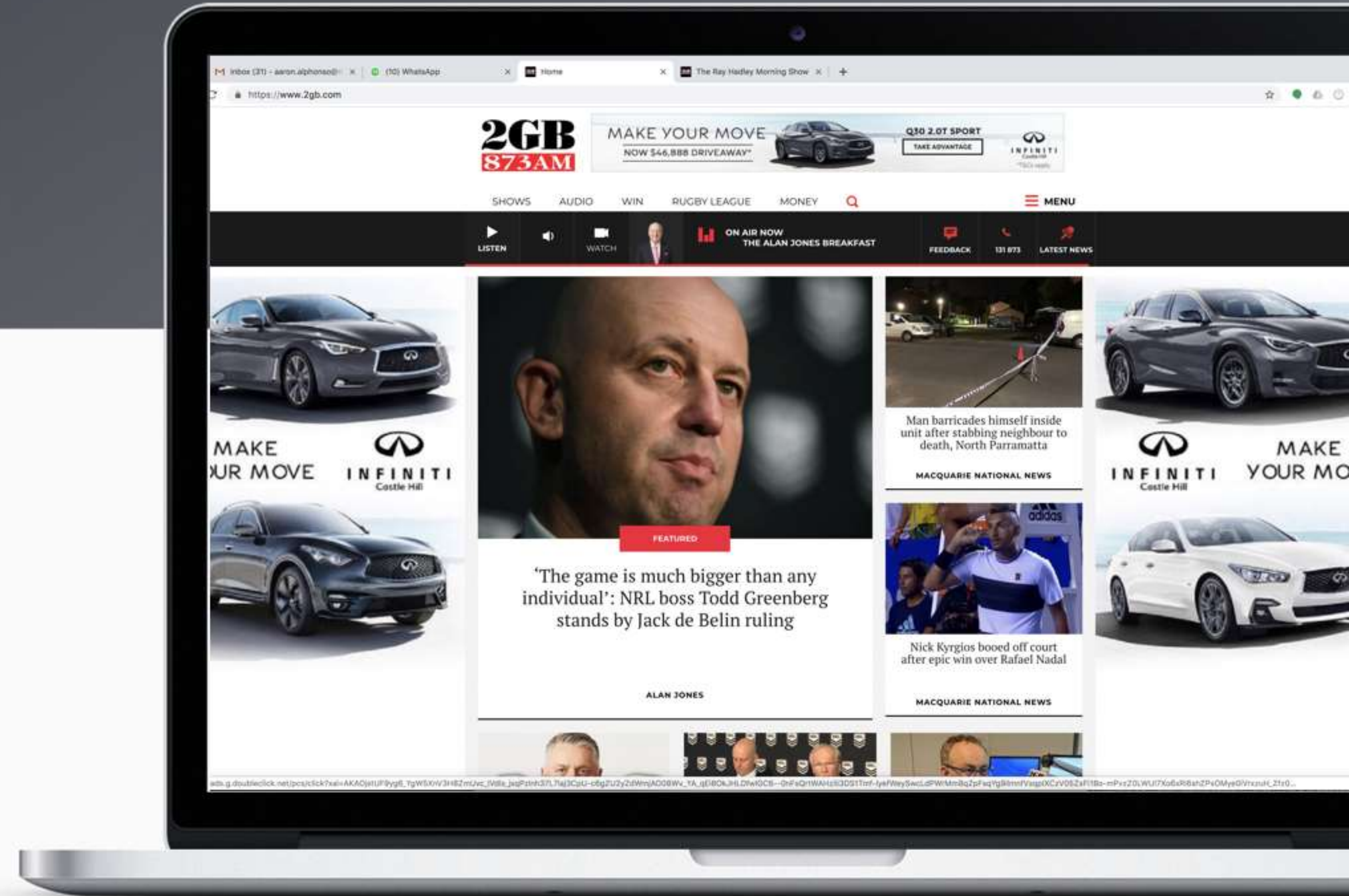
Open control protocols and API's

Known protocols and standards increase speed of integration and ease of automation.



Rich Supporting Data / Metadata

Ensuring deeper data for each audio asset ensures that there is a consistent source of additional information for different digital platforms





aaron.alphonso@macquariemedia.com.au

Please **get in touch** if you have any questions