



IN-VEHICLE INFOTAINMENT:

THE KEY TAKEAWAYS



EXECUTIVE SUMMARY

- The In-Vehicle Infotainment (IVI) function will evolve from an optional to a fundamental element of the in-car experience. Investment in this area will grow, as will the sophistication and the feature set needed to meet the use cases that drivers and passengers want and will come to expect.
- As connected cars become the norm, IVI will benefit society through increased safety, improved navigation, faster journey times and, as a result, a reduction in pollution levels.
- IVI offers valuable real estate to enable new value-added mobile services and build incredibly strong relationships with car owners and users.
- Branded IVI allows OEMs to own the relationship with car owners and users and to control the in-car experience, which is crucial as Internet giants that are moving into IVI threaten to beat them to it.
- A dual strategy of supporting key mobile device brands – such as Google and Apple – while still retaining control through IVI technology such as ACCESS Twine™ for Car offers the most benefits for the automotive industry.

This blog is a summary of the previous seven in the series, which explain how in-car entertainment will progress from today through to the next generation of cars and onwards to level 5 autonomous driving. This summary explains how automotive OEMs and tier-1 technology suppliers can get there.

Maximise 4G networks – start preparing for 5G

4G networks are already widely deployed and provide a pathway for high-speed connectivity across audio, compressed video and two-way communication for BYOD and on-board apps. In Europe, all [new car models approved for manufacture after 31 March 2018 must have the 112-based eCall system installed](#) which uses a cellular modem within each vehicle.

Although 4G is ideal for streaming low bandwidth content, the cellular connectivity that will be fitted into all new cars is likely to be 5G ready – allowing a software / SIM upgrade to take advantage of new networks as they arrive to the market.

This move to 5G is more than just a gimmick; due to the short wavelength of 5G radio signals, cars, which have capacity for larger and better integrated radio antennas, will offer far superior reception than that of smartphones. With the car acting as a reliable 5G access point, the ability to project a Wi-Fi hotspot for occupants provides increased reliability and performance across the entire journey for driver and passengers alike.

Key takeaway: Cars that embrace 5G will hold a big advantage when it comes to purchasing decisions.

Don't forget radio

Audio is still the most favoured infotainment option for drivers and passengers alike and is going through an evolution with the addition of streaming. The first generation of connected cars have yet to fully integrate radio, streaming and BYOD services, leading to lower consumer satisfaction. IVI will increasingly act as a primary interface for audio service aggregation and integration including control pane functions such as voice recognition.

Value-added features – such as audio search and caching to overcome connection outages – enabled through IVI integration are a considerable consumer benefit. A software and cloud-based approach to in-car audio increases flexibility for consumers and allows OEMs to make service and feature enhancements without requiring a dealer visit.

This shift is most evident in the IVI platforms that are increasingly acting as the connection point between car manufacturer, consumers and additional services. The modern generation of IVI provides anything from connected entertainment and audio offerings, to navigation, parking and payment services. In the future, IVI will enable services such as streaming video and location-based advertising. The opportunity is broad and increasingly global from Netflix to Youku Tudou with consumers looking for localised content and IVI services that have the flexibility to change as markets evolve.

Key takeaway: Simplicity matters. As IVI grows in service offerings, OEMs will need to replicate the ease-of-use of traditional radio.

Get ahead in automotive: Deliver a unique IVI offering

Catering to the connected consumer is not a goal that can be achieved in isolation. OEMs will need to work with telecommunication service providers to build data plans that cater for differing levels of content access. Additionally, new content and data models in which certain services are already included in the cost of the car will be appealing to car buyers.

As we enter this inflection point for the automotive industry, we believe that successfully designing cars for three and six years out is an incredible challenge. This is why ACCESS is simplifying the route to premium content by functioning as a one-stop shop for OEMs. We enable this through securing content rights for TV, VOD, audio, games and apps for global usage in combination with the ACCESS Twine™ for Car IVI platform. By providing OEMs with a single point of contact for multiple markets, it is our belief that we are bringing a unique IVI offering to the market.

Key takeaway: OEMs have an opportunity to differentiate through IVI. Long-term planning is challenging in the automotive industry but IVI systems like ACCESS Twine™ for Car can help them bridge the gap.

Embrace the autonomous future

Ask any two senior executives within the automotive industry when autonomous vehicles will arrive to market, and the answers will almost certainly differ. What is clear is that it's a race that everybody is keen to win!

[By 2040, there will be over 2 billion cars in use](#) and it is likely that autonomous vehicles will make up most, if not all, new car sales. Brands that can deliver true value-added benefits to drivers and passengers will be able to capitalise on an untapped market. Those that don't will be letting a great opportunity slip through their fingers. For IVI, the arrival of autonomous vehicles is a game changer and shifts the perception of the technology from luxury to necessity. The big question is when will this happen? If the tech industry has taught us anything, it will probably be sooner than you think.

Key takeaway: Autonomy will turn IVI into a necessity, and it may arrive sooner than you think.

IVI: the route to success

We think there are 7 critical steps to IVI success:

1. Launch connected IVI in your next generation of cars.
2. Make sure you provide compelling and super easy to use connected audio and rear seat video experiences.
3. Deploy a dual strategy of launching your own app store while supporting key mobile device brands – such as Google and Apple – through your own branded IVI. Retain control of the in-vehicle experience through an IVI solution such as ACCESS Twine™ for Car.
4. Integrate a dedicated app store for cars that provides audio, video and journey specific apps.
5. Make sure you provide great experiences wherever you sell cars – this will require local content and apps.

6. Listen to your customers – and what they listen to and watch. If they want Netflix and Spotify, provide it to them.
7. Implement your connected IVI strategy as soon as possible.

If the automotive industry does not embrace next generation IVI, someone else will: however given its 150 year history of anticipating change and finding new ways to make the most of advances in technology, I'm sure the OEMs, Electric Vehicle (EV) & Automated Vehicle (AV) companies and Tier-1's will drive next generation connected IVI experiences. Given the rise of EV and AV, we can already see today how there is a foundation for the automotive industry to realign its offering and capitalise on the exciting new opportunities and recurring revenue business models on offer. So embrace the future. Combine your existing app store, alongside a solution such as ACCESS Twine™ for Car which is designed to support key mobile device brands, and operate a winning strategy that will protect you brand and drive it towards an exciting new future.

I hope you've found this blog and the entire series informative. If you'd like to know more about how we can help car manufacturers and Tier-1's create breakthrough new services using ACCESS Twine™ for Car, along with guidance on critical considerations such as security, privacy, technical integration and emerging standards, then please [get in touch](#).

Yours truly,
Dr Neale, Foster, CEO at ACCESS Europe