

Infotainment

Apple announces deeper integration of CarPlay

10-minute Insight

At Apple's WWDC event in June 2022 they announced a new version of CarPlay that promises much greater levels of functionality and integration than is currently available – including an expansion into the instrument cluster. Although it remains reliant on the user's smartphone, it looks and feels more 'native' than any previous smartphone integration solution.

In this bi-weekly insight we analyze how the industry is likely to respond to Apple's move and what it means for the much-anticipated Apple Car.

Target audience

Engineering Strategy

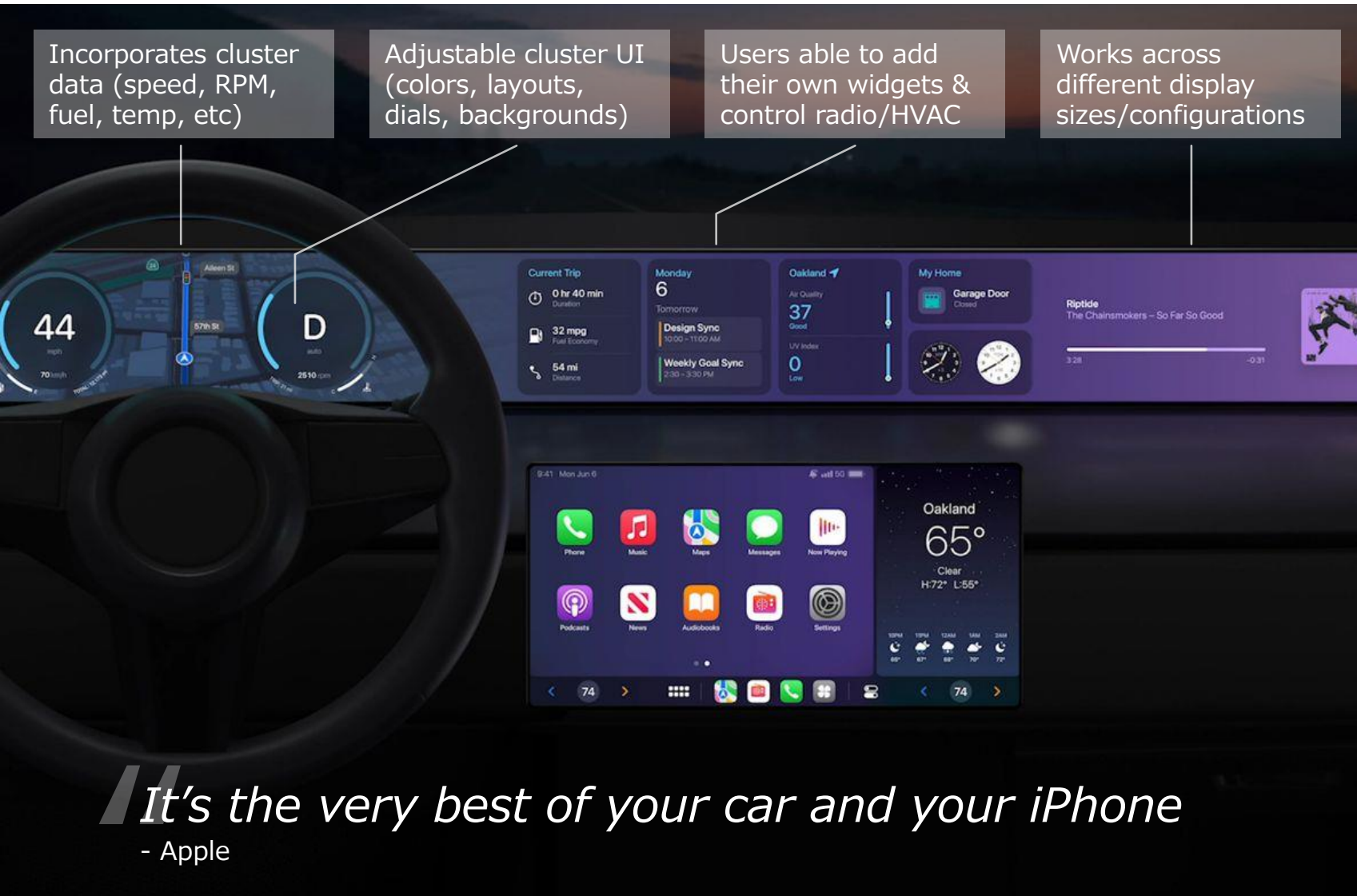
Marketing Product Planning

Focus market(s)

Global



What is happening?



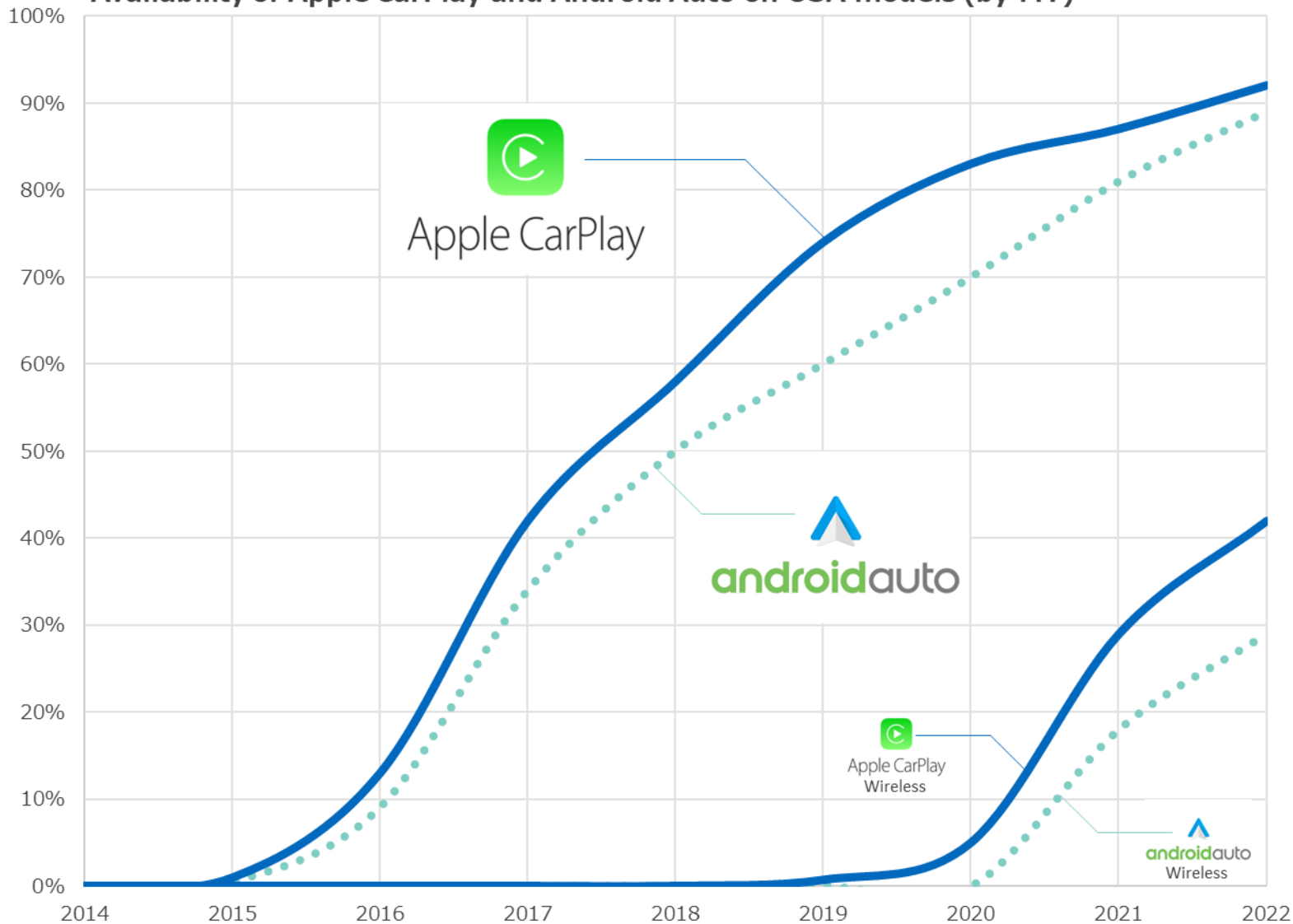
Key takeaway

Apple has **announced** an ambitious upgrade to CarPlay, which if adopted by OEMs would effectively take over much more of the IVI and Instrument Cluster UX.

- The new version of CarPlay includes deeper integrations into the car, allowing users to control various vehicle functions such as HVAC and taking over the instrument cluster (note various features like ADAS/settings will still require an OEM UX).
- Apple's stated intention with this latest move is to develop a more unified, consistent and personalized experience for drivers.
- Although this still classifies as a 'Brought-in' solution as it relies on the user's smartphone, SBD expects this level of integration would require more Apple software in the car – this therefore begins to stray into a hybrid 'Native/Brought-in' platform

Why does it matter?

Availability of Apple CarPlay and Android Auto on USA models (by MY)

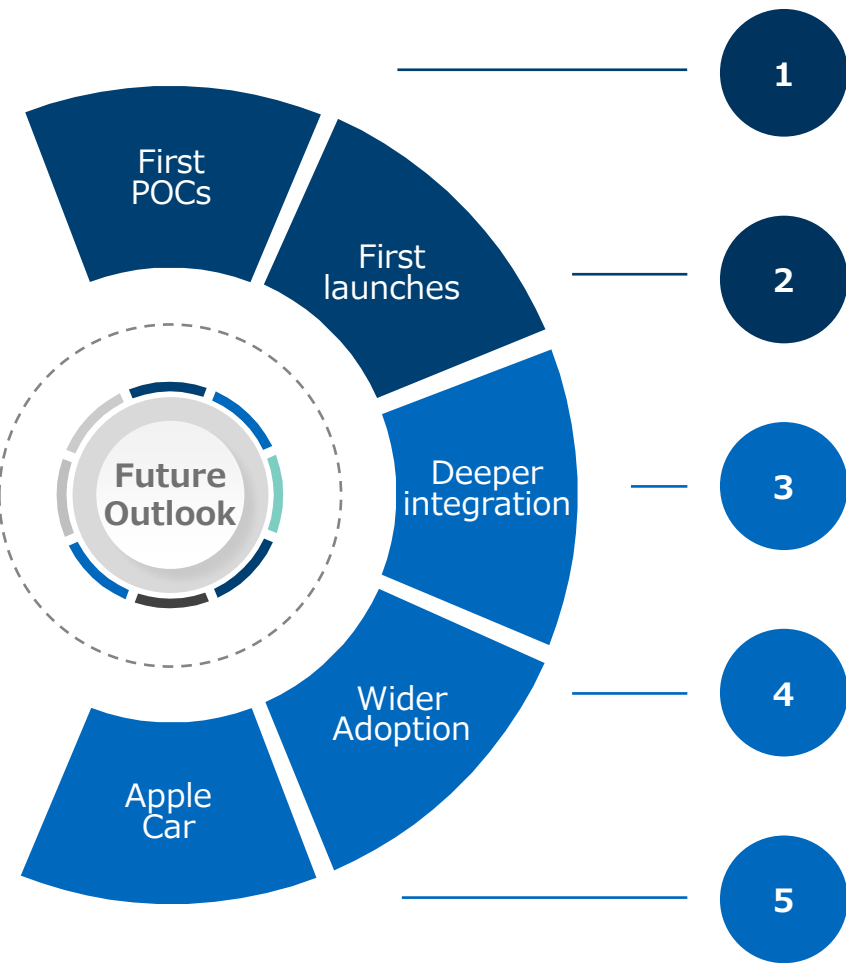


Source: [VehiclePlannerPlus](#), 2022

Key takeaway

CarPlay and Android Auto broke records when first introduced, with [availability rates across US models reaching almost 100% within 5 years](#) (Wireless versions of both features are on a similar path). Will a deeper-integrated Apple CarPlay follow a similar trajectory?

- The short answer is 'Probably not' – even for car makers that embrace a wholesale takeover of their cockpit UX, a deeper integration will take longer to develop, test and deploy.
- Deploying an [ASIL-compliant](#) instrument cluster that relies on a user's smartphone will be tough in the short-term. A more likely scenario is that car makers incrementally enable deeper integrations over the coming years, building some of the additional functionality Apple has announced (e.g. HVAC control, widget support, etc).
- Regardless of the speed, however, Apple in the car is here to stay.



1 Expect the first OEMs to demonstrate the new version of Apple CarPlay at the 2022 LA Auto Show or CES 2023

2 Early launches of some deeper integrations may occur in the next 1-2 years, but with limited functionality

3 A 'Full Vision' solution, including instrument cluster integration could be launched by 2025

4 While not as fast as the initial CarPlay, SBD expects various OEMs to adopt the deeper integrations in the next 3-5 years

5 In parallel, the industry is starting to get a fuller picture of what the eventual Apple Car could feel like

Key takeaway

In many ways we've seen this movie play out before: tech company launches new solution, some OEMs feel pressure to become an early adopter, other OEMs stand firmly against adoption, and everyone waits to see how consumers react.

- The first generation of Apple CarPlay took 2-3 years from announcement to introduction. Despite the deeper integration, SBD expects a similar timeline for the first introduction of this latest version of CarPlay, as architectures have modernized and various start-up OEMs with limited or no legacy will be capable of moving fast. But widespread adoption will likely take longer as many OEMs take a wait-and-see approach.
- The elephant in room remains Apple Car – although with every passing year more and more of the Apple Car experience becomes clear: CarPlay, Apple Maps, Apple Music, Apple Key, etc.

Other Tech Giants

Google, Amazon, Baidu and Alibaba are among the various tech giants that have equally large (although strategically different) ambitions for the car. Expect to see clarifications and extensions of their respective visions in the coming months.

Apple

Apple's reach into the car continues to extend, as does the continued doubt amongst OEMs about if/when Apple will pivot from being a helpful partner to a daunting competitor.



Early adopters

The most likely early adopters will be luxury OEMs, niche OEMs or start-up OEMs, many of whom have the agility and motivation to act fast. Expect other OEMs to take longer before making a decision.

Tier-1 Suppliers

Although Apple is taking over some of the traditional Tier-1 supplier duties, many will be keen to show support for the deeper integration required by CarPlay (particularly to support their 'Cockpit-wide' and consolidated ECU demos).

Key takeaway

Apple announcements always create ripples in the market, pushing others to react. Many companies will stay on the sidelines, waiting for more details to emerge before deciding which way to jump. Others will feel pressure to react fast.

- [Android Automotive](#) and [Google Automotive Services](#) has been the center of attention within the IVI community for the last few years, and Google will be planning similar APIs to support deeper integrations. Apple's solution will challenge Google's native push, and other tech giants are expected to also join in with their own announcements in the coming months, giving OEMs more choices.
- On the adopter front, the most likely early adopters will be lower-volume OEMs (niche, start-ups, luxury), who will need to rely heavily on Tier-1 suppliers that are keen to prove their hardware and SW-integration capabilities.

How should you react?



1

Wait

Announcements from Apple trigger questions among automotive executives, and often create an urgency to adapt existing strategies. However, it is important to highlight that these are still early days – only Polestar has announced plans to support it, but given the lack of technical/commercial details available from Apple it is unlikely any OEM or supplier can know for sure when they would launch.

2

Evaluate

Deeper integrations of Apple CarPlay will be an attractive proposition for some car makers. As a first step, understanding the technical requirements (from chipset to cloud) of implementing deeper integrations will help determine how commercially and technically feasible it is on existing platforms.

3

Jump

Future versions of CarPlay will make it harder to support the 'All-of-the-above' strategy that has defined IVI – supporting multiple types of integrated solutions alongside OEM-based native ones. Moving forward, success will be contingent on clearly choosing what not to do.

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