The next frontier for apps - the connected car

Consumers now rely on smartphone apps for almost every aspect of their daily lives. But the ability to use these apps in cars has been severely limited, largely because apps are typically not designed for use while driving.

MirrorLink provides the solution to this challenge. It is the leading industry standard for car-smartphone connectivity, designed for maximum interoperability between a wide range of smartphones and cars. MirrorLink is also the only OS- and OEM-agnostic standard, enabling apps on any compliant smartphone to work with any compliant in-vehicle infotainment system (IVI) regardless of operating system or hardware manufacturer. In addition, MirrorLink ensures that apps used while driving conform to industry guidelines for minimizing driver distraction.

MirrorLink has considerable industry momentum. Millions of MirrorLink-enabled cars and tens of millions of MirrorLink handsets are in the hands of consumers, and developers are already bringing driver-aware MirrorLink applications to market.

This broad adoption is due not only to MirrorLink’s innovative technology, but also to the fact that it is the only vendor-neutral standard in which no single entity has a controlling stake. MirrorLink is developed by the Car Connectivity Consortium (CCC), which has more than 100 industry members representing the majority of global automotive and smartphone markets, as well as leading manufacturers of aftermarket IVIs.

**MirrorLink Benefits**

**Benefits for industry**
- MirrorLink allows all industry players to have an equal stake in defining smartphone-car connectivity, as well as the freedom to offer a differentiated experience. It enables handset vendors and automakers to deliver innovative apps to consumers within a branded environment on a large IVI screen.
- **For handset vendors**, MirrorLink is enriched by the fast-growing base of millions of mass-market MirrorLink-enabled vehicles, which will create a sharp increase in consumer demand for MirrorLink smartphones.
- **For automakers**, MirrorLink provides a competitive advantage in bringing popular apps to the dashboard. For example, automakers can include their own set of whitelisted and branded apps.

**Benefits for developers**
- Developers can publish once to reach the dashboards of multiple automakers, representing the broadest possible market.
- MirrorLink is an innovation platform that gives developers the freedom to differentiate their offerings and create a whole new realm of driver-aware apps. App developers can focus on innovating content, because MirrorLink transparently manages underlying communications.
- MirrorLink offers the fastest global route to a huge new market for automotive apps, with a MirrorLink Developer Fast Track program that helps developers comply with regional driver distraction guidelines, overcome the challenges of designing driver-aware apps, and gain greater market exposure.

**Benefits for consumers**
- MirrorLink turns the promise of the connected car into reality. Today, consumers can already choose from a large selection of phones from different brands, and they can use these devices in MirrorLink-enabled cars from their favorite manufacturers.
- Drivers have access to a wide variety of innovative smartphone apps instead of a limited set of functions determined by a single entity. MirrorLink apps that are already available or undergoing certification include entertainment, sophisticated online and offline navigation, location-sharing, parking assistance, and other intelligent location-based services.
- Ingenious MirrorLink technology provides an irresistibly intuitive consumer experience. Huge icons make apps easy to use. The technology automatically adjusts app behavior to provide the best user experience whether the car is moving, parked or in stop-and-go traffic.
OVERVIEW OF MIRRORLINK ARCHITECTURE

The user's smartphone connects to the IVI either wirelessly (via Wi-Fi) or via a USB connection. The apps run on the smartphone, mirroring their user interface (UI) to the IVI display and streaming audio via the car's speakers. MirrorLink handles communications between smartphone and IVI transparently to the application, using industry-standard mechanisms and protocols.

Developers can use the MirrorLink OS-independent Application Programming Interface (API) to create driver-aware apps that comply with regional driver distraction guidelines, and to obtain a richer set of information from the car.

MirrorLink certification ensures that devices communicate seamlessly, and that apps work with MirrorLink-compliant smartphones and IVIs. There are two levels of app certification: base-certified and drive-certified. Base-certified apps may be used when the car is parked; drive-certified apps may be used while driving. Apps can automatically switch between drive and park mode.

BEYOND TODAY'S APPS

In the future, there will be opportunities for apps to gather data from the ever-growing number of in-car sensors, combining that data with information stored on the phone and in the cloud to provide users with completely new functionality. Join the adventure! Find more information at www.mirrorlink.com. Start redefining the connected driving experience today.