

Topic: Vehicle Experience & Content/Entertainment Birds of a Feather

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What is COVESA?

(COVESA) Connected Vehicle Systems Alliance (COVESA), formerly known as the GENIVI Alliance, is a global, member-driven alliance focused on the development of open standards and technologies that accelerate innovation for connected vehicle systems, resulting in a more diverse, sustainable and integrated mobility ecosystem.

COVESA is the only alliance focused solely on developing open standards and technologies for connected vehicles, which now form a growing percentage of vehicles on the road. Leveraging vehicle data and vehicle-to-cloud connectivity has become a primary goal of automakers and their suppliers.

COVESA is well-positioned as an experienced collaborative community given its strong foundation of introducing the Vehicle Signal Specification (VSS) and the Data Expert Group. Members are encouraged to build on this foundation by introducing projects that deliver specifications, open source licensed software and related materials that equip the industry with useful assets for commercial solution development.

Framing Questions

How can we deliver, manage and continue to improve upon great experiences in and out of vehicles? What common non-competitive elements are required (e.g. capabilities, data, content...)? How can we deliver these elements to accelerate and sustain great experiences?

Background

The transformation of the digital cockpit associated with the connected, software defined vehicle continues to grow the ecosystem of connected services that was once only concerned with the smartphone community. Today, Android Auto & Apple CarPlay play a significant role associated with the In-Vehicle Experience, they promise to go even deeper.

Vehicle experiences are rapidly changing. More compute power and faster networks enable an explosion of ubiquitous and rapidly available data driven, evidence based decisions to create and update experiences quickly and continuously. This in turn enables new services, revenue models, interactions, regulation and functionality. Ownership models change. Service models change. A vehicle no longer stands on its own disconnected. They become part of a much larger ecosystem. No one company or person will own, shape or define this. The greater connected vehicle ecosystem will.

OEM's continue to evolve user experiences. New vehicle capabilities, streaming services and emerging applications all are impacting the ecosystem, along with a plethora of additional information to be communicated to the occupants. The Vehicle Experience BoF is all about—the Journey. Driver & passengers interact with the vehicle and content throughout the journey. The proliferation of ADAS, Connectivity, Electrification, Autonomous, and Shared all bring nuance & expectations in the interaction, display of information and non-distracted controls. The power of community will benefit those who desire to take advantage of it.

Problem Statement

Consumers expect the absolute best, safest and problem free content and experiences available from their phones, smart home devices, computers and electronic devices, immediately as they become available. Why would they expect less from a vehicle? They won't.

To enable this vehicle manufacturers must not think in terms of fixed predefined use cases bound to specific hardware. They must think in terms of what content, capabilities, functions and flexible interfaces must be enabled to support great current experiences as well as those yet unknown future experiences. They must also think in terms of rapid, safe, frictionless updates to the content and experiences.

Vision

COVESA provides a Birds of a Feather community where thought leadership, validation and open collaboration around vehicle experiences occur:

1. Assemble emerging automotive UI/UX challenges/solutions/standards and inform stakeholders through published guidelines, briefs, webinars and event presentations`
2. Equip stakeholders with the opportunity to learn, understand and exchange thought leadership regarding the common concerns and challenges in the evolving digital cockpit.
3. Enhance cross-collaboration with other COVESA initiatives, especially those in the Data Expert Group, including VSS, applicable to the User Experience and the evolving applications associated with the emerging Vehicle Services Applications.

4. Due to the sensitive and competitive nature of Vehicle Experiences, there will be an initial workshop to discuss and identify non-competitive areas that could be addressed for the below items (5-7). The outcome will be documented as a guidance brief.
5. Deliver education that equips software developers and architects with an understanding of typical approaches for optimizing content delivery to the vehicle architecture.
6. Assure the testing and validation process understanding of the new content's impact to the software defined vehicle's user experience.
7. Advise COVESA software development activities how the existing or potential new standards can benefit the optimization software ported, streamed, accessed and updated for the in-vehicle experience.

Target Audience

Professionals (Executives, Managers, Product Managers, Program Managers, Designers, Software Engineers, and more) interested in understanding, enabling, creating, and advancing great vehicle experiences (in and out).

Value to COVESA Members and Industry

Provides a community for members to discuss, learn, and validate ideas and thought leadership as related to vehicle experience. Identify, create and align non-differentiating work product (e.g. specifications, guidelines, whitepapers, software components, tools...) that enable, facilitate and accelerate connected vehicle experiences.

Scope and Potential Outputs

As thought leadership, open collaboration and validation of ideas are key to this BoF, it will have regular presentations and webinars by industry professionals. The slides and perhaps even recordings will be made available. Common challenges, guidelines, concerns, standards, architectures... will be documented in the form of briefs or white papers. Education and training materials for software developers and architects may be created. Data and interface specifications that facilitate and accelerate or otherwise improve vehicle experiences will be informed, created and/or updated, especially those of the Data Expert Group.