DVN-I
Automotive Interior

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Editorial

IAA Mobility Has Rewritten The Rules

INTERIOR DEMONSTRATOR AT THE MERCEDES BOOTH

It was so exciting! The IAA Mobility 2021 show in Munich was a reinvention of motor shows. It was in a new city, too—a sparkling way of rediscovering the joy of meeting in person with customers, partners, and car enthusiasts all together with real cars we could touch and feel.

The macro trend at this event shows a significant move towards automation and sustainability. Automation means powerful computer architectures, semiconductors, software, digital chassis, connected

ecosystems, and upgradability on demand. Sustainability means CO2 neutrality, new and natural materials, recyclability, and such.

Companies like the VW Group, BMW, Mercedes, Hyundai, Faurecia, Brose, Continental, Bosch, and others are thoughtfully speaking to this transformation. The Renault-Google-Qualcomm partnership we describe in this week's newsletter is yet another example of a company moving toward building scalable architectures updatable with software and powered by new kinds of semiconductors.

IAA Mobility 2021 shone bright light on the future of the automotive industry, and DVN-Interior is here to bring you the relevant parts of what that light reveals. This week's in-depth report focuses on automakers' interior efforts, and interior innovations in general; next week we'll focus on sustainability and suppliers.

We are heartily thankful to each and every member of the DVN Interior community. If that's not you yet, come **join us**!

Sincerely yours,

Philippe Aumont
General Editor, DVN-Interior

In Depth Interior Technology

Interior Innovations IAA Mobility

IMAGE: IAA MOBILITY

Introduction

A new mobility fair replaced the longrunning IAA auto show this year. The new show moved from Frankfurt to the Bavarian capital Munich. The new IAA was branded and configured as a comprehensive mobility trade fair no longer exclusively about cars. Around 700 exhibitors participated, including 70 suppliers from the bicycle and scooter industry, in two full halls. That showed real commitment to changing the topic to comprehensive mobility.

IAA Mobility had three focal points. The **summit** in the halls of Messe München were the core of the new trade fair in terms of content. The focus was on innovations and content, where experts could exchange ideas, for example at press conferences or stage presentations. **Open Space** referred to places near the city center where ideas for the mobility of the future were presented; attendees could try out innovative cars, e-bikes and e-scooters. And the **Blue Lane** connected the Open Space and the Summit Messe München via test drives in new, environmentally friendly EAVs (electric/autonomous vehicles).

Thematically, automakers strove to shine in Munich above all with their new electric models. Classic combustion models were scarce on the show grounds.

VW ID.LIFE

Volkswagen, for example, showed their ID.Life and ID.Buzz models.


MERCEDES EQG, FRONT AND REAR (IMAGES: MERCEDES)

Mercedes was all in on electrics, too. The Mercedes EQE, Maybach EQS, G-Class (in future EQG) and AMG GT were all battery-motivated. Renault introduced their new Mégane E-Tech, and Hyundai showed off their Ioniq 5.

AUDI GRANDSPHERE CONCEPT

Audi's current concept cars are all EVs—for coverage of the Grandsphere, said to be between 75 and 80 per cent ready for series production to replace the A8, see last week's DVN Interior newsletter. Ford presented only their Mustang Mach-E electric. A couple of Chinese brands, Wey and Xpeng, were all electric. The only real ICE unveiled in Munich was the new Dacia Jogger 7-seater.

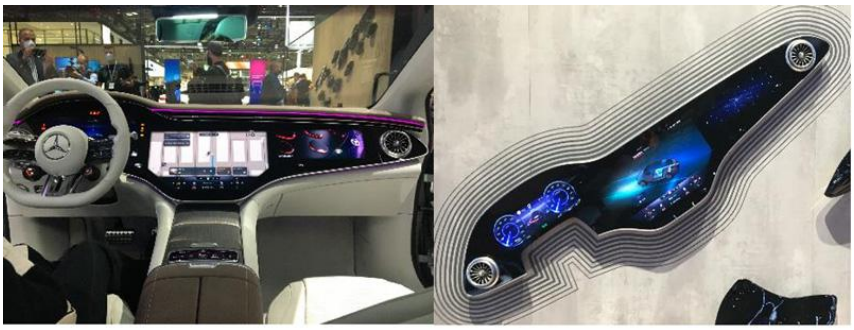

BMW I VISION CIRCULAR, LEFT; I4, RIGHT (IMAGES: BMW)

So, in short, it's all electric! But this alone is not enough nowadays. Like the 100 per cent recyclable BMW I Vision Circular, sustainability is everywhere. Next week's in-depth will focus on materials and sustainability.

BROSE DOOR MODULE; MAGNA FREE-FORM SEAT (IMAGES: PA)

Major interior suppliers were very present at IAA, including Ascorium; Bosch; Brose; Continental; Cipia; Faurecia; Gentex; Hella; Hyundai Mobis; Magna; Mahle; Qualcomm; Samsung; Siemens; Valeo; Webasto, and ZF. Their exhibits thematically showed that the interior domain is aggressively bringing new materials to the mobility equation in response to sustainability demands…and that semiconductors, software, and connectivity are definitely the future of the automotive industry.

Automaker Innovations



MERCEDES EQS HYPERSCREEN HYPERSCREEN "SCULPTURE" (IMAGES: PA)

Mercedes

The Mercedes Cockpit with MBUX Hyperscreen was presented in DVN Interior on Jan 27, 2021, but the Munich show was the first time to see it in person, and in person it is even more impressive in terms of size (pillar to pillar!) and execution, integration, and flushness. The new EQE, alongside the previously-presented EQS, shows Mercedes interior quality is at the highest level. The door panel presented here shows very high quality of materials; fit and finish; precision of the upper light guide; seat control integration; storage capacity, and sound system—everything is close to perfection.

MERCEDES EQE DOOR PANEL (DVN-I IMAGE)

BMW

BMW MINI URBANAUT (DVN-I IMAGE)

Another see-in-reality surprise here was the BMW Mini Urbanaut, which even bigger than VW's ID.Buzz minibus. Already presented in DVN Interior

on July 15, 2021, this new concept for future urban mobility has been conceived to explore ideas based around clever use of space. It sets out to create what is described as "modern living space", and is slated to be introduced around 2025, both as a 5-seater passenger car and as a commercial vehicle. As the Munich local, BMW was heavily present at all show locations, with almost the whole portfolio in the Open Space, a Mini Pavilion on Lenbachplatz, the BMW Museum and even BMW Welt Olympiapark to experience the mobility of tomorrow in their Development Center.

BMW I VISION CIRCULAR CONCEPT (DVN-I IMAGE)

The central overall theme was about sustainability and circular economy; watch this space next week for our detailed coverage of the BMW i Vision Circular concept.

VW

VW's ID.Life concept is a boxy little four-door compact car that's actually more reminiscent of the Honda-e than VW's other, more streamlined ID models. VW says it will cost around €20,000, which would be very affordable for an EV, in the same price range as the Dacia Spring announced earlier this year. It is based on a pared-down version of their MEB platform.

VW ID.LIFE CONCEPT INTERIOR (DVN-I IMAGE)

The interior of the ID.Life is minimal. There's a yoke-style steering wheel with touch-sensitive buttons, and there's no standard dashboard display; instead, VW imagines owners will drop their own phone or tablet onto the wooden dash and let those devices run the infotainment system. To that end, there's a wireless charging pocket in the fabric of the driver's door. The rear bench seat is small, and the "frunk" (front trunk) is also tiny, as it appears the front footwells take up much of the space under the hood that isn't occupied by the electric motor. Cameras replace interior and exterior mirrors.

It includes a clever, but maybe silly feature with an integrated projector and a projection screen that extends up from the dash—shown here—the idea being that you could fold the front seats down and watch a movie or play video games from the back seat. It will be interesting to see if that makes it into production.

VW IMAGE

Five years after Volkswagen first floated the notion of electric revival of the storied microbus, they're hitting the road as an autonomous test vehicle using hardware and software developed by Argo AI.

Renault

RENAULT MÉGANE E-TECH (IMAGE: RENAULT)

The Renault Mégane E-Tech shows Renault is betting on a high-caliber digital in-cabin user experience to attract consumers of Generation X and younger who depend on an extensive digital life. Going on sale next year in Europe, the car is the first model to be exclusively "Made in ElectriCity," Renault's new industrial hub for EVs, based on three previous plants in northern France (Douai, Maubeuge, and Ruitz).

The interior includes the branded OpenR screen with a 12.3" dashboard screen and 12-inch multimedia screen, with Google Apps and Qualcomm Snapdragon processor with 4K multiple display capabilities and advanced connectivity with USB-C ports.

The instrument panel section of the OpenR screen accommodates four different driver displays according to their priorities: driving layout, navigation layout, zen layout and battery layout, and the display can be wholly customized. It features five widgets—fuel use, tire pressure, distance, eco-monitor, music—and eight color schemes.

Renault - Dacia

DACIA JOGGER (DVN-I IMAGE)

Dacia put forth a world premiere: their all-new versatile 7-seater family car, the Jogger. It shares its dashboard with the Sandero, itself quite similar to the one in the India-market Renault Kiger SUV. A horizontal theme is seen here with a textile finish in the middle. For an entry-level product, it has quite a bit of content: an 8" touchscreen, instrument cluster with a 3.5" MID, Android Auto/Apple Carplay, heated seats, and other suchlike.

Ford

FORD MUSTANG MACH-E (DVN-I IMAGE)

Ford's European-specs Mustang Mach-e has arrived to strengthen the high-tech image of the Ford brand. In parallel to IAA opening, Ford CEO Jim Farley announced Doug Field from Apple to lead Ford technology initiatives. He had been running Apple's efforts to develop their own vehicle and was previously its head of hardware engineering.

As presented here last December, the Mustang Mach-e includes a new version of Ford's SYNC infotainment system, which comes with a giant 15.5" tablet touchscreen.

Wey

WEY'S A WAY FORWARD CONCEPT CAR (DVN-I IMAGE)

Wey, one of Great Wall Motors' brands, presented a concept vehicle named A Way Forward. Front interior architecture is unique or weird, depending on who's describing it. There are three front seats mounted on a turntable with a variety of layouts possible: one driver seat in the middle and two facing rearward, or the opposite with two front-facing and one rear-facing. The steering yoke moves along the dashboard accordingly: left, middle, or right. These seats have also long travel capabilities to allow reclined positions. Of course, everything has to be choreographed so seats don't bang into one another!

WEY X CONCEPT (DVN-I IMAGE)

Wey also presented the Wey X concept, and production vehicles Coffee 1, kind of a bigger DS7 clone with a really roomy interior, and Coffee 2.

Hyundai

The Ioniq is presented as a robotaxi—sensible; its 3-meter wheelbase opens a really huge rear compartment space.

Micro

Micro is a Swiss brand founded in 1997, with engineering and production near Turin in the ex-Bollore Paris Autolib plant.

MICROLINO (DVN-I IMAGE)

The Microlino, a light electric vehicle of the L7e class, is conceptually quite a bit like the BMW Iseta of the 1950s. The Microlino could be the iPad of the mobility world, combining the advantages of a car with those of a motorbike. It's tiny 2-seater with a front opening.

Interior News

Brain Control In Mercedes AVTR Concept

INTERIOR NEWS

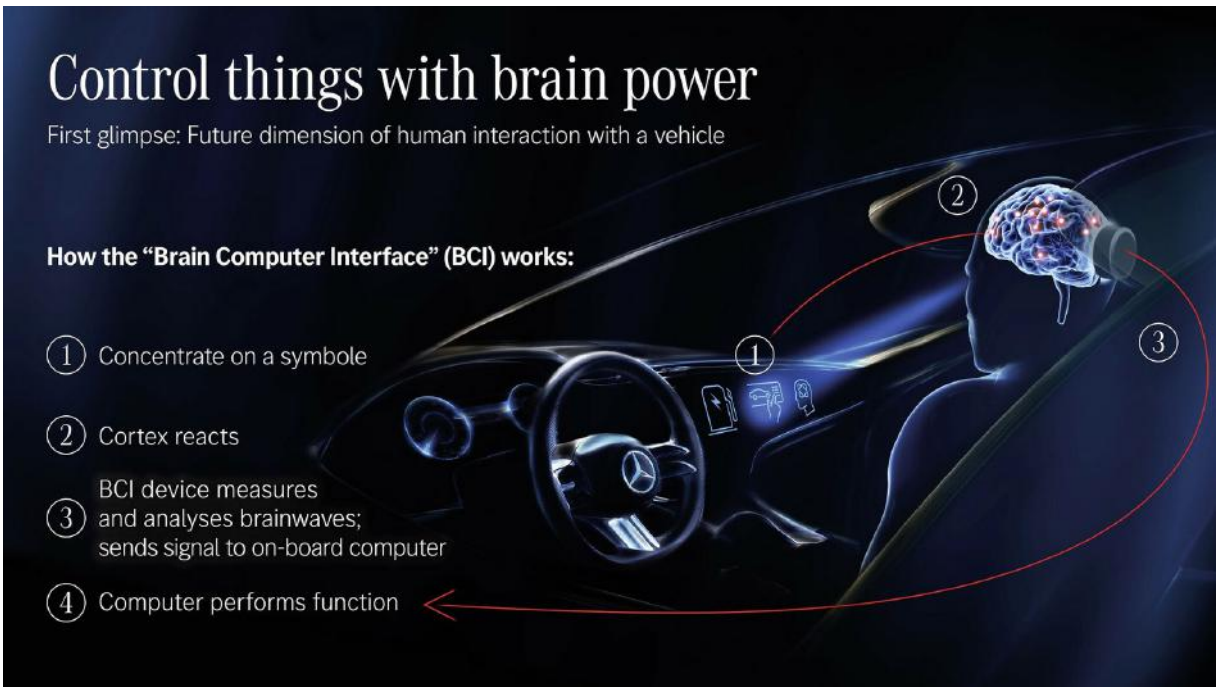


IMAGE: MERCEDES

In Daimler's vision of the future, voice control in the car is already old-fashioned as passengers will be able to control their vehicle with their thoughts. At the IAA in Munich, the company showed how this could work in the Vision AVTR concept.

Steering wheel and pedals have disappeared. Instead, a huge curved screen stretches across the cockpit. In the middle, you place your hand on a control element whose shape is reminiscent of a computer mouse. The user reclines in an armchair, rather than sitting. With seat vibrations reminiscent of heartbeats, the car indicates that it has adjusted to its passenger—specifically to their brain waves.

Sensors are attached to the back of the head with a headband that can measure brain waves. Once the system has detected the user's thoughts, it can putatively determine where the driver is looking. This actually works in the model, albeit only with three simple pixels on the screen, each representing an operating command. It seems to us any production

version of this technology would have to be contactless to gain traction commercially.

Because it will still take a while until this development stage is reached, the engineers are working on intermediate steps that could also be seen at the IAA and could possibly be used in production vehicles much more quickly: If you hold your open hand in front of you, small symbols light up on it that come from a projector in the ceiling. Closing the hand triggers the associated function. Almost like a ghost's hand—or controlled by one's own thoughts.

Mercedes Board Member for Sales Britta Seeger says "The Brain-Computer Interface (BCI) technology has the potential to further enhance driving comfort in the future." Similar to autonomous driving, this technology should also lead to even more people being able to use a car who were previously unable to do so because, for example, they have a disability that limits them.

Cap Gemini: Software To Survive Automotive

INTERIOR NEWS

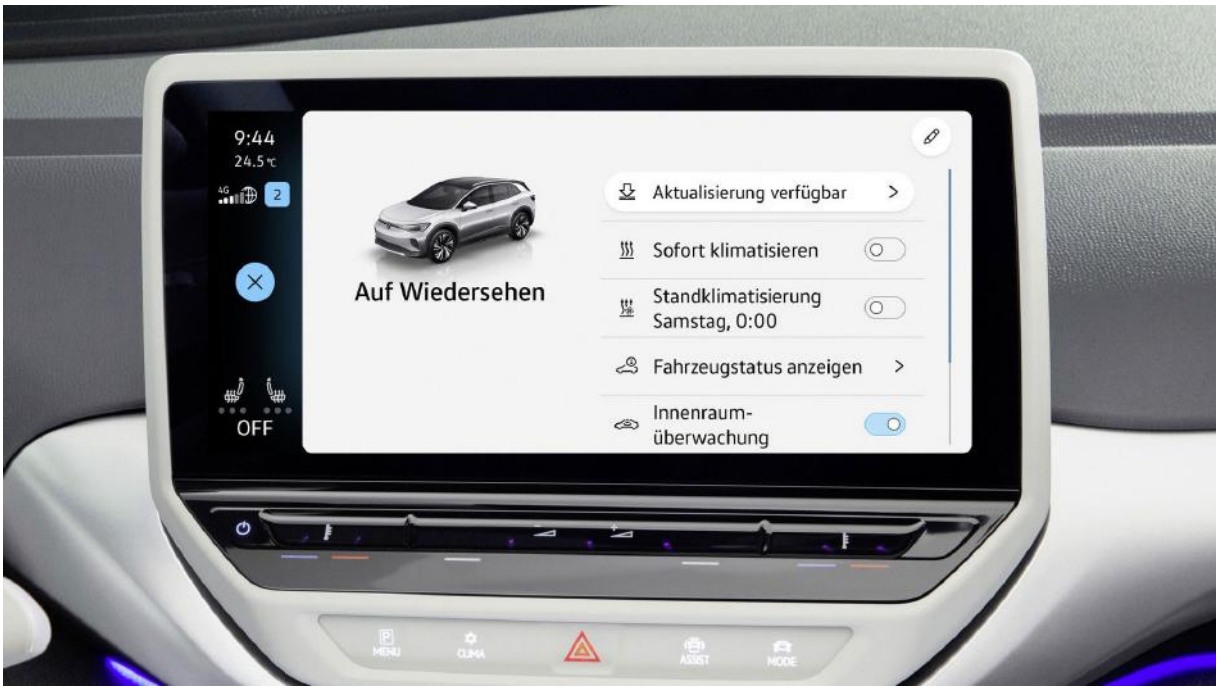


IMAGE: VW

Car manufacturers who can exploit the full potential of software will have a competitive advantage. This is the conclusion of a survey by Capgemini Research Institute among 572 automaker executives worldwide, as well as a series of in-depth interviews with 17 industry experts on various aspects of software-driven transformation. This survey has been published in parallel to IAA.

Software is becoming increasingly important; by 2030, market volume is expected to more than quadruple to around €260bn. Especially software outside the vehicle (off-board) contributes to this development, according to auto industry consulting firm Berylls. At the same time, development costs in this area are rising; almost half of the development budget will be spent on electronics including software in about eight years.

But a large proportion of automakers still see themselves as poorly positioned for this transformation. Among the executives surveyed, about 70 per cent see themselves as just in the initial phase for software-driven business models (Germany: 53 per cent). Just 28 per cent of automakers surveyed had a pilot project or a proof of concept (Germany 41 per cent; China 63 per cent).

Capgemini estimates that software can help to increase productivity by up to 40 per cent and reduce costs by 37 per cent. Quickly applicable software platforms are important for this - analogous to the platforms in vehicle construction such as MEB or E-GMP. According to the survey, the

share of vehicles per automaker with a uniform software platform will rise to an average of 35 per cent in the next ten years (2021: 7 per cent). German manufacturers remain conservative in this area (4 to 23 per cent).

The topic of operating systems (OS) has been discussed for months. The term is not precisely defined and is therefore often used for different applications. As a rule, it refers to a software layer on which developers can develop and operate apps. This OS layer is not competitively differentiating, explains Jan Becker. The co-founder of Apex.AI is one of the first on the market to offer a ready-made OS. TÜV has certified Apex's software and Toyota is one of the first automotive customers. While Volkswagen wants to develop its own operating system, makers with much smaller development budgets than the VW Group are working with tech companies. Volvo and Polestar rely on Android Automotive. BMW also seems to be outsourcing rather than trying to handle this task alone; shortly before the start of the IAA, BMW's Frank Weber called for cooperation in the media. The average investments per maker in software-driven transformation (in billions of US dollars) until 2026 are, for example, China 4.1; Japan 2.4; Germany 2.4; USA 1.7; South Korea 1.7, and UK 1.0.

Capgemini managers are convinced that software has the potential to reshape the automotive market. Makers could increase their market share by an average of nine percent compared to the competition, they explain. In the opposite case, they assume that even the existence of an automaker would be under threat!

Brose Smart Comfort Solutions

INTERIOR NEWS

At the IAA Brose used a near-series vehicle to show how they are connecting vehicle access, seats, interior configuration and thermal management to create an overall experience for users.

Brose has developed software that enables seamless and sophisticated interaction of adjustment systems, sensors and electronic systems in vehicles. The BRAIN suite—Brose Access and Interior Network—integrates into the electronics and software systems of a wide variety of vehicles and automakers. Standardized interfaces make it possible to control Brose products and even third-party components. Brose demonstrated this software integration in a high-performance vehicle electronics system of their cooperation partner Joynext, a German technology supplier in the fields of car infotainment, vehicle networking/connection and telematics.

Powerful electronics ensure smooth interaction between components that previously worked independently of one another. Door modules, liftgates, seats, center consoles and air conditioning all work hand in hand to ensure maximum comfort and convenience. Brose manages systems including the broader value chain (example: brushless motors).

Many convenience features were presented: the car recognizes and welcomes the driver with projections in the side windows. A simple gesture, and the door opens automatically. There's a three-zone-control: touch to open door by 5 cm, auxiliary backup handle, and an open plastic zone for any sensor an automaker would like to add.

Whether occupants choose to work, relax or drive the vehicle themselves, electronically-controlled seats, screens, and storage areas coordinate their positions and the flow of air from the AC system adjusts accordingly. If desired, the back seat can rearrange to form two individual seats that allow passengers to fully recline for ultimate relaxation, or the interior can flexibly adapt to offer maximum cargo space.

Together with partner Bode, Brose has developed an access concept for Robotaxis. Among other features, the system includes operating interfaces, obstacle detection and technology for fully automatic opening and closing of vehicle doors. Brose is also developing safe, comfortable solutions for standing and reclining while driving.

Brose is also actively involved in the emerging e-bike and e-scooters market. It's a business extension, based on motors, control units and power electronics expertise.

Polestar 2 Interior Shines With Crystal Finish

INTERIOR NEWS

POLESTAR 2 INTERIOR (DVN-I IMAGE)

Polestar, part of the Geely Group positioned as the Volvo EV advanced lab, presented their Polestar 1 super premium sport sedan and Polestar 2 SUV.

The Polestar 2's interior feels comfortable and relaxing: crisp lines, high-quality materials, and an 11.5" Android-powered central touchscreen to control most vehicle functions, plus a 12.3" driver's display behind the steering wheel.

Attention to detail includes a sculptural crystal drive selector and a tactile rotary control for infotainment navigation, and bright yellow seat belts.

Interior architecture is built around a high-set dashboard, high-waisted doors and Volvo-derived steering wheel. The center console rises high up between the front-seat passengers to meet the large floating vertically oriented touchscreen. Available as options: panoramic glass roof, 13-speaker Harman Kardon audio system, WeaveTech vegan upholstery, black ash deco panels, fully electric heated front seats with memory, and heated rear seats.

Ascorium Interior Technologies On Display

INTERIOR NEWS

IMAGE: ASCORIUM

Ascorium Industries, a new name in the automotive sector (See DVN Interior April 1, 2021) showed off their wares in the IAA European High-Tech Pavilion: a range of polyurethane spray skins with superior haptics, extreme durability, and nearly unlimited scope for design.

It's a two-layer skin, with an aliphatic surface layer and a fitter aromatic layer sprayed with a lower density to reduce weight, to be attached to the carrier. It applies to instrument and door panels, glove boxes, small parts or top covers. Any type of grain is possible, and can include molded seams and real stitching.

Ascorium presents a set of core technologies, such as ROM® (Reaction Over-Molding) for direct production of complete components, Compolite®,light weight composite carriers, DBM®, Direct Back Molding for vertical integration of independent production steps, Ascorium 2D® , a vegan solution for the premium segment.

Smart (i.e., functional) surfaces include the integration of sensors and electronics through back molding. Ascorium calls it Colo X-Function^3, as Approach, Appear, Activate for touchpad function or interior lighting activation.

These PU-based surface technologies help create a harmonious vehicle interior. A wide variety of materials, such as wood, leather, textiles, light guides, sensors, and mechanical elements, can be integrated effortlessly—a perfectly coordinated vehicle interior that meets the highest standards of appearance and feel.

The Design Lounge

Mobilize (Renault) BEV Limo

THE DESIGN LOUNGE

Renault unveiled at IAA their solution for future mobility regarding ride sharing and taxi/mobility companies. It's called the Mobilize Limo. This is a BEV sedan similar in size and theme to the Tesla Model 3 but available only through a subscription service without any public purchase opportunity.

Tesla Model 3

Wheelbase	2,875 mm
Length	4,694 mm
Width	1,849 mm
Height	1,443 mm

Mobilize Limo

Wheelbase	2,750mm
Length	4,670 mm
Width	1,830 mm
Height	1,470 mm

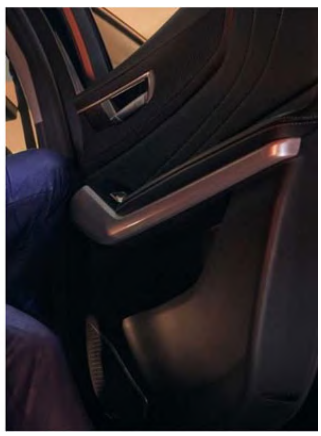
Sitting squarely in the D-Segment category, the overall volume of the interior is dedicated to the three across seating for the rear seat passengers, with a fully-flat floor.

An information-focused environment for the driver and front compartment integrates the latest thin horizontal cluster/centre-screen display without the typical brow above it.

There's a refrigerated storage area in the floor console, under the armrest.

Using a strong horizontal theme, the Mobilize Limo breaks no new thematic ground. Instead, it relies on a clean and crisp execution using a traditional layout. Notice how the HVAC ducts and decorative trim inserts could also come straight out of a modern BMW, though perhaps here with greater purity of line.

The browless cluster/center-screeen seems to be the new idea for digital displays, along with a steering wheel with thumb operating controls and a squared-off bottom.



Overall detailing is also traditional and straightforward with brightwork used to break up bulky switches and the upper to lower delineation on the door panels.

Thematically, the rear seating area following this traditional design approach with a wide and flat rear bench seat and minimum trim detailing.

As a dedicated ride share/hailing/taxi vehicle, including a strong thematic element to a very functionally oriented rear occupant area could be counterproductive. It's difficult to avoid the feeling that the Mobilize Limo was initially designed as a traditional D-segment sedan. Knowing what Renault design has accomplished over the years, a more dedicated mobility solution might well have been expected, rather than a traditional D-segment design theme.

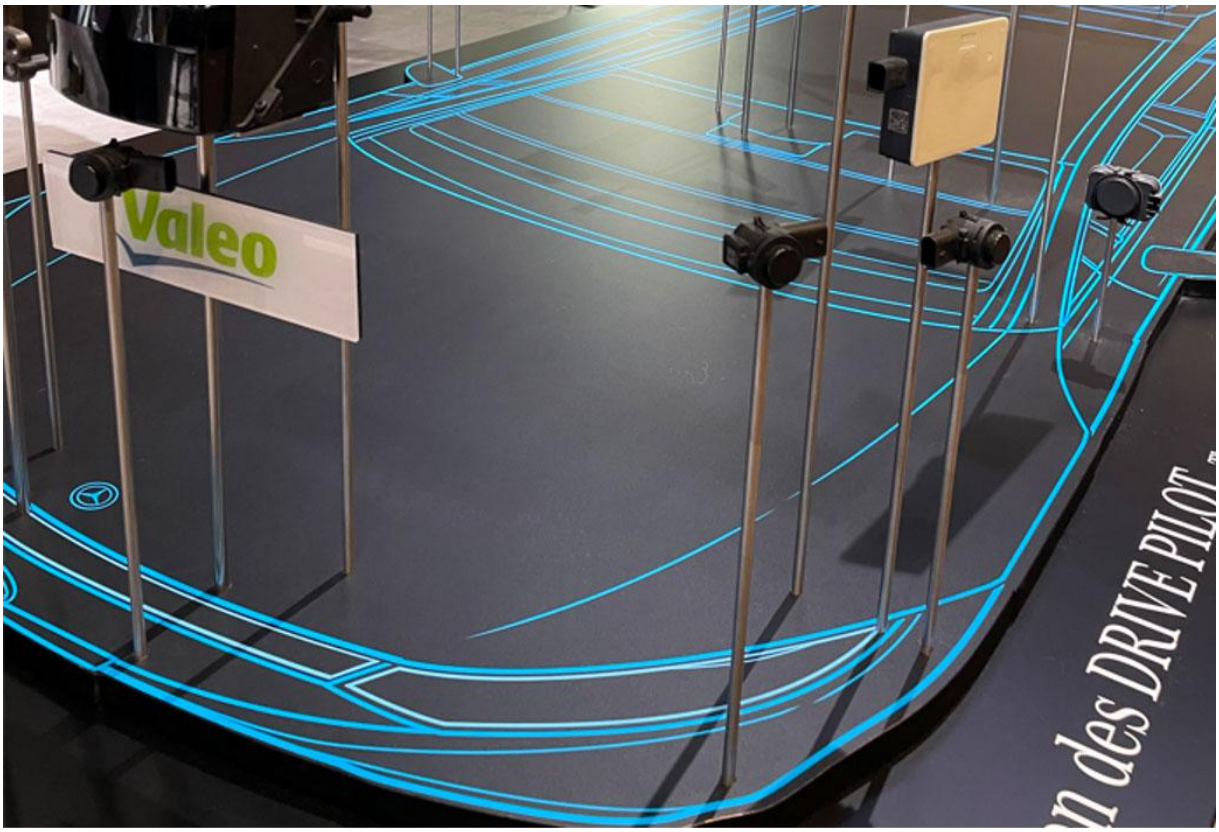
News Mobility

_Car Interiors Unplugged: On Hiatus

Car Interiors Unplugged will resume after summer.

Computer-On-Wheels Over The Air Update

NEWS MOBILITY



"System update available". Over the next few weeks, more than 140,000 owners of a Volkswagen ID.3 or ID.4 electric car will see this message on the display of their vehicle. The update 2.3 is not just a minor update of the navigation software or the infotainment system. VW intervenes deeply in the functioning of the electronics of the vehicles without VW customers having to visit a workshop. The update is installed via a built-in mobile phone connection, just as one might update the OS on a smartphone. Other manufacturers also use WLAN connections for their updates.

Since 2013 Tesla has gained experience with wireless software distribution and software updates "Over the Air" (OTA), i.e. via a mobile phone connection. In addition to pure bug fixes, Tesla also uses OTA updates for free performance improvements. Furthermore, additional functions such as the so-called "Autopilot" assistance system can be added online for a fee.

Tesla is not the only company to have discovered this business model as a new revenue stream. Audi, for another example, also offer "functions on demand" such as LED matrix headlamps, high beam and parking assist, or additional navigation functions that are activated online—for a fee, naturally. The McKinsey management consultancy estimates that OTA updates could also eliminate some recall campaigns and save automakers enormous amounts of money in the process.

But the ADAC (Allgemeiner Deutscher Automobil-Club—German Driver Association) sees a danger with OTA updates that car manufacturers may be tempted to put a vehicle on sale that is not yet fully developed and only secretly remove possible software errors over time. "Faulty software was the reason for 16 per cent of recalls in 2018; this figure may rise in the future," says ADAC technology expert Arnulf Thiemel.

For major development stages, such as fully autonomous driving, not only a comprehensive software update is necessary, but also additional hardware. Systems such as steering, brakes and power supply must be designed redundantly, i.e. they must be virtually duplicated and thus fail-safe. Virtually the whole automotive industry agrees that a combination of radar, lidar, and cameras is necessary to ensure that a complete system failure is impossible. Tesla's notoriously cocksure CEO Elon Musk says lidar is for "losers", and recently decontented his cars' machine vision systems to camera-only.

Mobileye manager Johann Jungwirth, who previously worked on the future of the car at Volkswagen, Apple and Daimler, assumes two phases. "Next year we will start with robo-taxis or shuttle vehicles. Til 2025, the focus will be on 'mobility at the push of a button'. From 2024 autonomous driving will be offered as a premium feature for private cars".

General News

Qualcomm, Renault Partner For Immersive Experience

GENERAL NEWS

RENAULT MÉGANE E-TECH (IMAGE: RENAULT)

Qualcomm Technologies, Google, and Renault Group have announced a partnership to bring immersive in-vehicle experiences to Renault's new Mégane E-Tech EV, which was unveiled last week at IAA Mobility. Renault will use Qualcomm's 3rd-Generation Snapdragon Automotive Cockpit Platform—video **here**—to power the infotainment system. Each infotainment system will come equipped with Google apps and services such as Google Assistant and Google Maps to further provide an intelligent experience for drivers and passengers.

Immersive, personalized in-vehicle experiences has been a key goal for many automakers in the last few years. Nearly every car is equipped with sensors and complex infotainment centers that are designed to meet the needs of drivers and passengers, but most have not risen to the level of personalization that consumers are used to receiving elsewhere, especially

in the EV space; the Qualcomm-Google-Renault partnership seeks to remedy that by offering highly intuitive AI-driven experiences for in-car assistance and safety uses.

This is the second major automotive partnership for Qualcomm, who previously announced a partnership to supply chips to GM vehicles, but this is the first specifically for electric vehicle production.

Antitrust Authorities Approve Brose-VW JV

GENERAL NEWS

IMAGE: BROSE

The antitrust authorities have issued all of the necessary approvals for the planned joint venture between Brose and Volkswagen, paving the way for the company to begin work as scheduled in early 2022. Brose Sitech intends to become a leading global supplier of seat systems and interior solutions.

Sitech, a VW subsidiary, has extensive expertise in the development, assembly and logistics of complete seat systems. As a leading supplier of seat structures, Brose brings their knowledge in seat frames, mechanisms, manual and power adjusters as well as comfort components. Brose Sitech wants to expand the existing business with the Volkswagen Group and also act as an independent seat supplier for other car manufacturers.

Brose will own a 50 per cent interest in Sitech, and Brose and Volkswagen will each hold a 50 per cent share of the planned joint venture. The parties have agreed that Brose will take over the industrial leadership and consolidate the joint venture for accounting purposes.

Ulrich Schrickel, CEO of the Brose Group, says: "I am happy that we have reached another milestone in our joint venture Brose Sitech with the approvals from the antitrust authorities. The market for seating systems is highly competitive but offers great potential: regardless of the type of drive, cars are equipped with seats. We want to take advantage of this opportunity with the joint venture. Our goal is clear: we want to be among the leading suppliers of seating systems and interior concepts".

VW Group Board Member for Engineering Thomas Schmall and VW Group Head of Seating and Sitech Management Board spokesman Ingo Fleischer released a statement saying "The vehicle interior is becoming increasingly important in the course of electrification and autonomous driving. Brose and Sitech are combining their different competences to bring innovative products and future-proof complete seat concepts to the road and to create the foundation for a global growth strategy in the Volkswagen Group and in the third-party market. We want to achieve this through high performance, quality and productivity. Our employees will continue to be an essential part of our success".