DVN-I
Automotive Interior

Thu, 29 April 2021 Weekly Newsletter NEWSLETTER #58

Editorial

Shanghai DVN Workshop & Auto Show: Real Life Is Back!

Live events are gradually coming back. Last week in Shanghai, we put on a real, live DVN Workshop with presentation sessions devoted to automotive interior topics. This great event got more than 200 speakers and attendees on site plus a crowd of online speakers and participants. We're covering here an abstract of several interior related lectures.

The workshop was organized to coincide with the Shanghai Auto Show, which was for the first time in quite awhile being held as a live event. From a foreign DVN perspective, it was still a virtual visit, that we report hereafter. The good news is that, because of physical reality, automakers and global suppliers invested in expo booths, concepts and prototypes, reflecting a kind of re-birth of innovation activities.

The Design Lounge covers part II of our Mercedes EQS overview, with focus on how lighting is used to enhance ambiance and materials of the interior design.

We hope you enjoy this virtual Shanghai trip, nice to have you on board. To be ready for the next one, don't forget to **subscribe**!

Sincerely yours,

Philippe Aumont
General Editor, DVN-Interior

In Depth Interior Technology

Shanghai Auto Show: A Parade of EVs and Supplier Technologies

While the Covid-19 pandemic has put most auto shows in Europe and the US in a sleep mode, the Shanghai show opened on April 19 under its normal schedule, with coronavirus safety protocols in place. About 1,000 exhibitors—automakers and suppliers—showed off their latest cars, products, and solutions for the industry in the 12 halls (~360,000 m^2) of the Shanghai National Exhibition and Convention Center. Travel restrictions made it impossible for most auto executives from the rest of the world to attend. So, even though it was the first non-online auto show in a while, a great deal of videoconferencing and virtual tours were organized, and that's where this report comes from.

In a nutshell, it was an EV show, as most new models launched were EVs—demonstrating the real traction electric automobility is gaining, particularly in China.

• Automakers

BMW

IMAGE: BMW GROUP

BMW showed their pure-electric iX EV based on a new modular, scalable architecture. It's to be offered in two specifications: xDrive40 and xDrive50, with two levels of acceleration, power, and driving range. One of the focal points of the BMW's presentation, here in Shanghai, was around seamless integration of additional digital services, using market-specific apps in China, thanks to BMW's new Operating System 8.

Cadillac

IMAGE: GM AUTHORITY

The production version of the 2023 Cadillac Lyriq was revealed. This SUV is Cadillac's first all-electric vehicle and the first of several upcoming EVs for the brand. It uses the Ultium EV architecture, the Vehicle Intelligence Platform (VIP), Super Cruise, and many advanced technologies, and a tidy, simply designed interior with a 33" curved screen and a pop-out "jewelry-box" storage tray.

Citroën

IMAGE: CITROËN

Citroën says their C5 X "combines the best attributes of a sedan, a station wagon and an SUV." It will be built in a Stellantis-Dongfeng joint venture plant in Chengdu and sold in Europe. Interior-wise, Citroën promises "absolute comfort", its traditional strong point, thanks to seats with specific padding, and above all advanced comfort suspensions, an exclusive innovation "aimed at recreating the flying carpet effect of Iconic Citroëns". The cockpit includes extended HUD, driving assistance systems that introduce semi-autonomous driving, and a whole new 12" HD touch screen communication interface with natural vocal recognition.

Ford

Ford presented a midsize SUV, the EVOS. It's the first vehicle created largely by a China-based team, planned to replace the old Mondeo (Fusion in the US) sedan. As you can see in this virtual picture, the cockpit has a 1.1m dash-screen, made out of a 12.3" driving screen, plus a 27" infotainement touch screen. The Evos will feature Ford's newly-announced L^2 self-driving feature called BlueCruise. It also gets a new Ford Virtual Personal Assistant to customize interior conditions. It has a "relax" mode in which lighting, seat positions, and audio can be adjusted to taste.

Geely – Zeekr


Geely Automobile Holdings, with their new EV sub-brand called Zeekr, introduced the Zeekr 001, midsize station wagon, similar to another model called 001 from Geely sub-brand Lynk & Co, all built on Geely's open-source, fully-electric SEA platform (Sustainable Experience Architecture). The interior is designed to give an electric feel, with an orange-dot trim design on the doors, including a grey panel filled with small holes. A tablet-like touchscreen in the middle of the dashboard, overhanging a thick, console, with a kind of shifter, cupholders and storage.


Geely's Xingyue L is 4.77 m long. It's ICE powered, with L^2 driving capabilities, including a completely unmanned automated valet system. The dashboard is unique, with a screen integrated into a large lacquered strip stretched to the far right, incorporating an infotainement screen facing the passenger.

Great Wall

Great Wall is also launching a sub-brand, for full-sized off roaders, called Tank. They introduce the Tank 800, promoted as offering "Business Luxury". The interior is indeed extremely luxurious, with a floating instrument and a floating central infotainement screen design, but still with a lot of physical buttons. There's a lot of suede, supplemented by wood grain and metal decorative panels. In the second row, the Tank 800 provides independent seats, leg rests, electric adjustments, and other functions.

Volkswagen

Originally previewed by the ID.Roomzz concept revealed at the 2019 Shanghai auto show, the ID.6 is produced at Volkswagen's Chinese-market joint venture partners First Automobile Works (FAW) and Shanghai Automotive Industry Corp. (SAIC), respectively, with 2 versions: the ID.6 Crozz and ID.6 X exclusively for the Chinese market, looking like an extended ID.4. It is available in 6- and 7-seater models, with the aim to create a "lounge on wheels" with semi-automated driving. It gets a very minimalist interior—though it takes simplicity to a new level by removing any physical buttons or switches. Everything is controlled through a 12" central display and a 'Hello ID' voice assistant.

Toyota

Toyota introduced their bZ4X Concept battery-electric SUV, built on the new e-TNGA BEV platform with an all-wheel-drive setup co-developed with Subaru, essentially merging the best of both companies. bZ stands for Beyond Zero (emission). The interior is futuristic but understated. The driving screen/instrument cluster is almost in a HUD position! The infotainement screen is tablet-like, on the dashboard and covered with fabric. There's a "floating" center console to connect with the central screen. Toyota announced solar panels to extend range, without information on their location.

Mercedes

The EQB is one of several electric Mercedes SUV models going on sale in the next couple of years. Digital instrument graphics and altered trims, including a new rose gold color for the aluminum-look air outlets and dashboard trim are new, as is the ambient lighting. The rest looks pretty much like its ICE sibling, the GLB. It retains the spaciousness and modularity of the GLB, in particular with a sliding seat in the second row. A 7-seater will be available, through a 3rd row for people up to 1.65 m, with the option of installing child seats.

Nio

Nio's ET7 electric sedan unveiled this past January made its first appearance at an auto show with the official debut of the interior. It includes Nio's 2nd generation digital cockpit featuring multi-screen interaction among NOMI, a 12.8" AMOLED center display, a 10.2" HDR digital instrument cluster, second row multi-function rear seat control with HDR touch screen, and enhanced HUD. The car comes with the most advanced 3rd Generation Qualcomm Snapdragon Automotive Cockpit Platform, and with an Immersive sound system: 23 loudspeakers, 1000W, 20 Channel amplifiers. The surface material uses a lot of natural rattan (sort of climbing palm) transformed into Karuun®. It is non-timber product with limited use transformed into a versatile, innovative material, using rattan long capillaries injected with various bulking agents.

Xpeng

Xpeng presented the P5, a family sedan with a focus on comfort, technology, and affordability, claiming having giving the most advanced ADAS available in China today. The P5's instrument console includes a 15.6" vertically-oriented large-size screen with all the essential information and. A fully-stocked ecosystem of in-house and third-party apps and software packages allows for rich user-created content and many configurable options. Xpeng also presented a second version of a flying vehicle.

BYD

BYD X DREAM CONCEPT (IMAGE: BYD)

BYD Introduced their 800V E-Platform 3.0, the EA1, and their X Dream concept. This new EV platform is smaller, lighter, stronger, has a wider track and a lower center of gravity, and offers more space. It facilitates a sense of movement and dynamics, all with lower energy consumption. BYD EA1 is an all-new urban model, and X Dream, is a concept that heralds a new "Dragon Face" theme for future BYD models.

Hengchi

IMAGE: HENGCHI

IMAGE: BLOOMBERG

Evergrande Group, a conglomerate whose property development business is the biggest in China, has launched the car brand Hengchi to tap the growing demand for EVs. Evergrande invested already in Faraday Future and NEVS (ex-Saab in Sweden).

All Hengchis on display all featured a numerical name starting from 1 up to 9. The Hengchi 1 is a large sedan to target the Tesla Model S, and the Hengchi 3, 5, and 6 are all crossovers of various sizes. It has been developed with support of international experts, such as German automotive engineering companies Benteler and FEV Group, as well as Swiss powertrain company Hofer Engineering.

The 1 is equipped with an aerospace-class smart cockpit with super-large triple screen an 18-way adjustable multi-function massage seat, a full-size glass dome beyond the horizon. It uses Baidu and Tencent's dual-ecological 5G interconnection technology.

Arcfox

Arcfox unveiled two versions of their Alpha S EV, co-developed by BAIC and Huawei's intelligent automotive solutions arm. They are both high-end luxury electric vehicles fitted with Huawei's homegrown HarmonyOS. Huawei has a few other partnerships with automakers apart from BAIC Group. Chongqing Changan Automobile and Guangzhou Automobile Group are also collaborating with the 5G global leader to develop autonomous and automated vehicles. Huawei looks like they're moving towards being the Chinese Bosch.

MG

MG Motor—part of SAIC—revealed their MG Cyberster, a two-door electric supercar with a digital cockpit representing the seamless interaction between actual and virtual reality in the era of digital intelligence. It will come equipped with a gamepad steering wheel and zero-gravity sporty seats. MG says the interior was inspired by the "digital fiber" theme. The front armrest features digitalized feathers that add visual appeal and create a tightly wrapped driving atmosphere. Several elements inside the cabin such as the light band, high-gloss metal, and large LED screen create a very eye-catching interior with fully touch-based interactions.

FAW

ONLY INTERIOR DETAIL AVAILABLE RIGHT NOW (IMAGE: SILK-FAW)

First Automobile Works (FAW), showed the first electric vehicle that's part of the government's massive Belt and Road project. The Hongqi S9 is a 1,400 hp hybrid hypercar created in partnership with Italian engineering and design startup Silk EV, under the design direction of Walter De' Silva, formerly of VW and now Silk-FAW's VP of Styling & Design.

• Tier-1 suppliers

Grupo Antolin

Spain-based Grupo Antolin showed technologies in three strategic areas: cockpits, electronics and lighting, and HMI. They presented their Inspire smart cockpit prototype, which shows their most advanced technology related to lighting & HMI, active surfaces and electronics. Dynamic lighting to create different driving scenarios, backlit surfaces in unique materials, a display decoration module, stitched light guides, smart decorations, natural active surfaces, light projections and the driver monitoring system are seamlessly integrated into a unique prototype. Other lighting, decoration, active surfaces, ceiling systems are presented within their innovation ecosystem, including partners such as Walter Pack, AED Technologies, Cipia (ex-Eyesight) and Naen.

Faurecia

IMAGE: FAURECIA

Faurecia showed their latest technologies for the cockpit of the Future and zero-emissions mobility. Their showcase included innovations designed for the needs of Chinese consumers enabling a safe, comfortable, and connected on-board experience. In that logic, a complete cockpit interior provides an immersive, personalized journey adapted to the needs of Chinese consumers. From smart surfaces, innovative multimodal HMI (with Horizon Robotics), occupant monitoring and wellness applications to full cabin infotainment with pillar-to-pillar displays. It includes Faurecia's unique LUMI innovation which embeds lighting features within the seating, enabling automakers to create a differentiating interior styling. Faurecia also showed

off ultra-low emissions technologies and zero-emissions hydrogen solutions for passenger and commercial vehicles.

Valeo

VALEO RADIANT HEATING (IMAGE: VALEO)

Valeo presented a series of technologies to transform vehicles into a sort of "health shield". Valeo's innovations detect pollutants and protect people from germs, allergens, and viruses by dint of a highly efficient filter. Among many innovations, they presented a new heat pump which procures two-thirds of its energy demand from the ambient air, thereby limiting the need to draw energy from the onboard batteries, and using a natural refrigerant, benefiting EV range autonomy. They also presented Valeo FlexHeater, a new smart heating technology involving radiant panels hidden under interior trim. It consumes 25 per cent less electricity with four passengers on board, and 50 per cent less when the driver is alone, compared to traditional forced-air heating systems.

Marelli

IMAGE: MARELLI

Marelli showed their intelligent interior technology with a "Smart Surface" demonstrator, a combination of the highest standards for look-and-feel in interior design with plastic parts and decorative skins, and cutting-edge electronics solutions for HMI integration. Their "Cabin Innovation" demo showed seamless integration of switch and display functions on the surfaces of decorative parts, made out of real or artificial leather and metal-like or wood-like decorations, and including air outlets with automatic wind direction control with decorative parts to combine design and comfort. They also presented electronic technology, playing a pivotal role in enabling the next generation of infotainment systems, with their Cockpit Domain Controller

Grammer

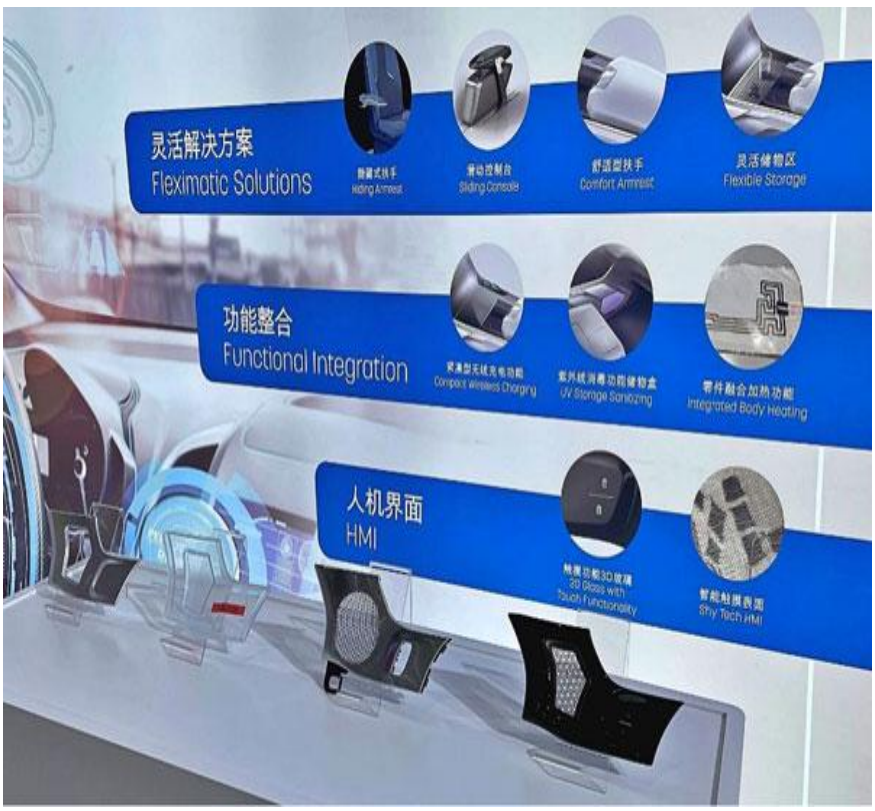


IMAGE: GRAMMER

Germany-based seating company Grammer presented product ideas and usage scenarios for future vehicle under the themes Living Space, Functional Upgrade, Premium Comfort, and Sustainability. The "Pure Concept" is illustrated by the likes of 3D-molded glass with innovative functionalities in premium surfaces, a sliding console offering highly flexible storage and design options, an audio headrest, for new sound and communication options into play, and console modules and air ducts that are sustainably produced from recycled materials.

Toyoda Gosei

IMAGE: TOYODA GOSEI

Toyota Gosei presented a next-generation safety system concept, with airbags integrated into seats to accommodate the more diverse occupant postures that are expected with autonomous driving.

IMAGE: TOYODA GOSEI

They also showed a steering wheel module concept with added HMI functions for coordinated vehicle operations between humans and systems. Driver monitoring functions sense the condition of the driver with cameras and sensors, and information is conveyed with light and vibration.

Toyota Boshoku

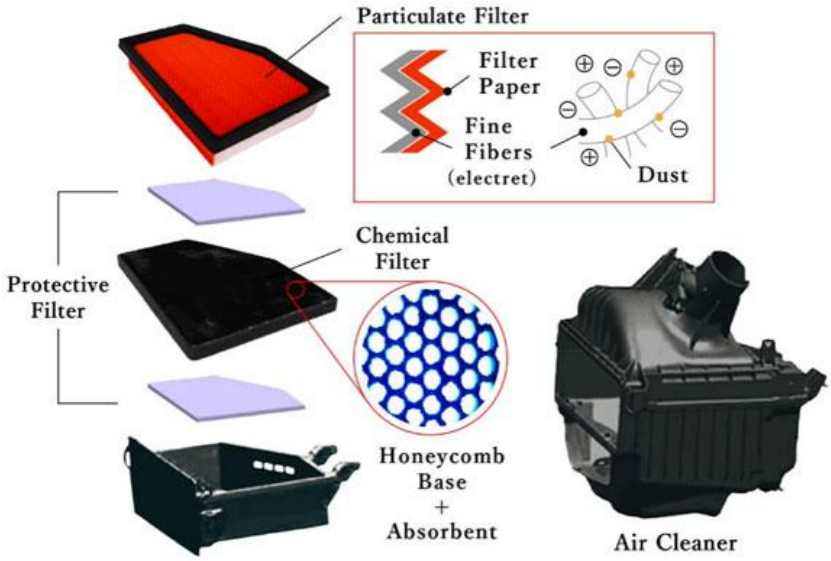


IMAGE: TOYOTA BOSHOKU

Toyota Boshoku presented their latest mobility concepts MooX (Interior Space Designed for MaaS) and MX191(interior space concept that supports L$^{3\text{-}4}$ autonomous cars, already presented in DVN Interior), along with an innovative Covid-19 prevention seat solution. This high-performance air filter enables minimum emissions, with an air filter to remove $PM_{2.5}$ with the world's highest-level efficiency as Toyota's first to materialize the new concept of Minus Emissions (The more you drive, the cleaner the air).

ZF

IMAGE: *ZF*

ZF unveiled the next generation of their ZF ProAI, which they describe as the most flexible, scalable and powerful automotive supercomputer and the source of vehicle intelligence. The newly upgraded ZF ProAI is a central computer suitable for all vehicle platforms, software applications and E/E-architectures. One control unit for all purposes and all automation levels from ADAS to AD – and smaller, more energy-efficient and yet more powerful than ever before. ZF ProAI can be equipped with microprocessors from all major manufacturers. Depending on the desired performance, different cooling options are available. This enables a total computing

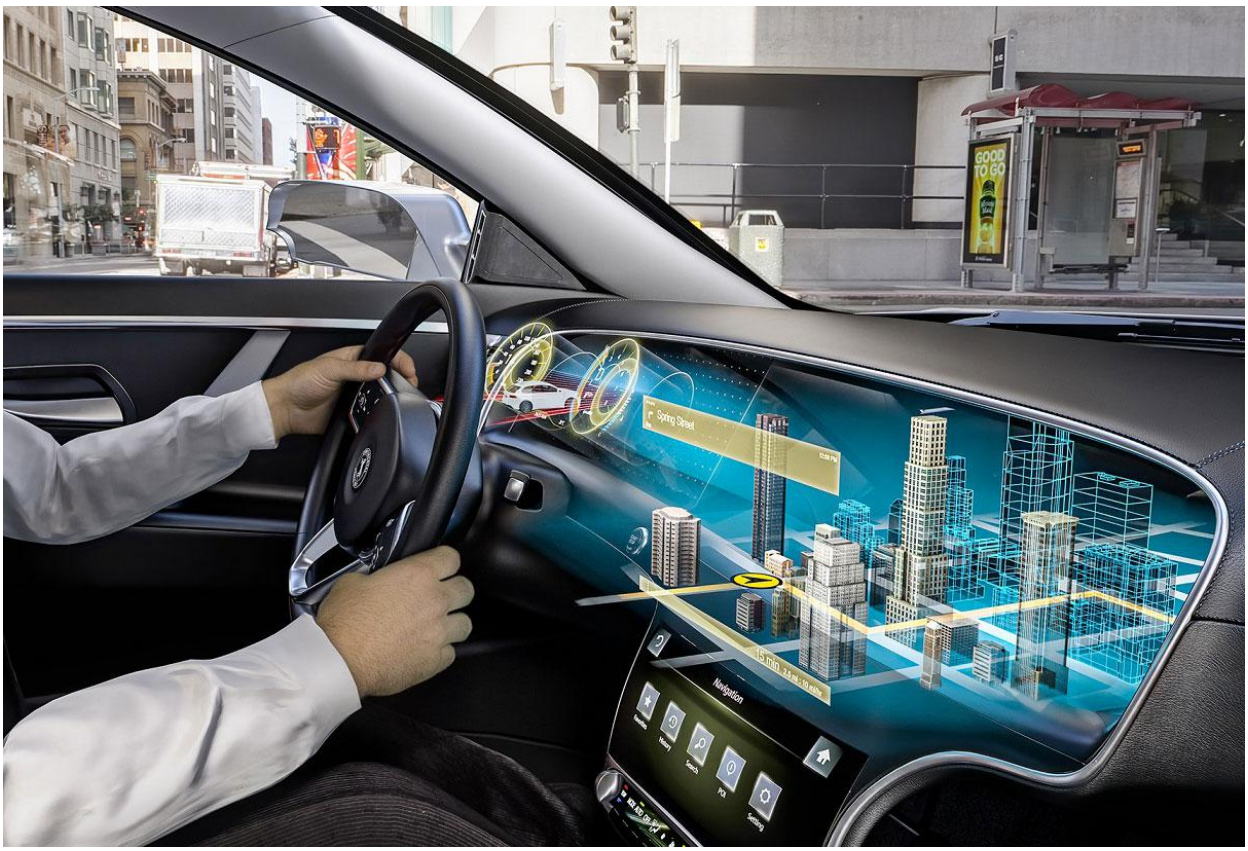
performance of up to 1,000 TOPS—that's a quadrillion (a million billion) operations per second.

Several auto launches and suppliers are not presented in this summary, as they were already published in DVN Interior Newsletters. These include the Honda-e, Lexus LFZ, Genesis G80, Audi A6 e-tron, and others. Deeper dive will be presented in further editions for selected innovations, pending interest, and information availability.

Interior News

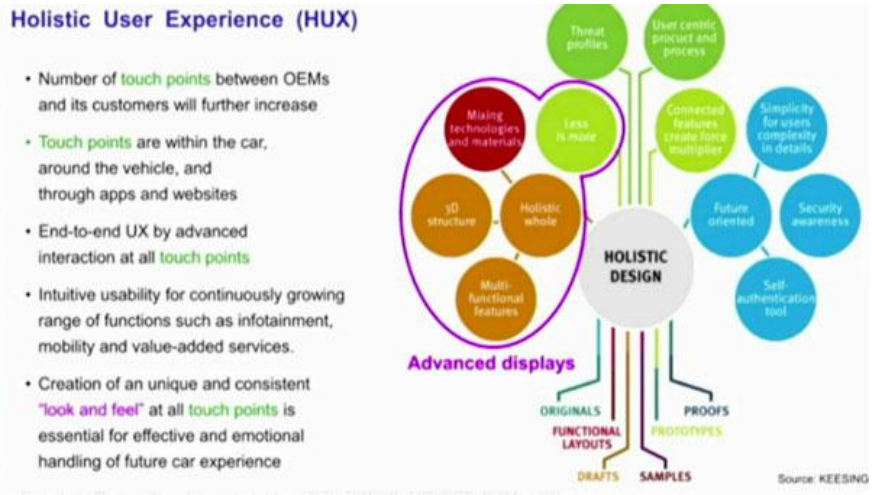
New Design Visions, Holistic HMI by Advanced Display Technologies

INTERIOR NEWS



(IMAGE: LEIA)

Prof. Dr. Karlheinz Blankenbach is a professor at Pforzheim University. He founded the Display Lab, which focuses on applied R&D on displays: Optical measurements, image processing algorithms, driving electronics and evaluation. He is vice-chair of Automotive/Vehicular Displays and HMI Technologies in the Society for Information Display (SID, www.sid.org), chairman of the German Flat Panel Forum (DFF, www.displayforum.de) and of the Electronic Displays Conference (www.electronic-displays.de).



This lecture presented the concept of Holistic User Experience, and where new display technology will support a full system approach, along the complete mobility process, starting from an App or from the web, to access the vehicle, and then to drive it. "This process creates an increasing number of interfaces between the user and the machine, in its extended meaning; not only in the interior, but also around the car (access), apps, and websites. Intuitive usability includes mobility itself, but also infotainement, and all the bunch of services becoming available from your vehicle (pay, toll, gas, food, hotel…). Thanks to progressive automation, drivers will have more time to interact, becoming more a passenger, what we have named here at DVN Interior, having "passenging" activities.

Dr. Blankenbach presented what would be next generation displays, what we would name advanced displays, covering new shapes (curved, 3D), higher pixels, holograms, augmented reality. These displays will have a major influence on interior/cockpit architecture and user experience design, laid out all around the occupants, from A pillar (for mirrors) and to even windows (through projection, with limitation, because of privacy); from augmented HUD to holograms and gesture controls. That means that displays will be less like being just put on a table, like a computer on your desk, and more really integrated.

This seamless integration into the cockpit system is key to physical integration into the trim elements, but also with functional surfaces, and also integration from a user interaction perspective with consistent look and feel at any interaction point.

Display density could then exceed 100 megapixels, requiring then higher computing capacity, and more complex interface management.

For HUDs, the next generation will be around from extended field of view. From a safety standpoint, to see properly lane, side road, and cyclist/pedestrian, vision has to extended beyond traditional 10° × 5°, up to 60°.

Backlighting Technologies, by DesignLED

INTERIOR NEWS

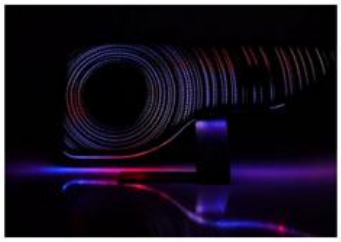
Dr. James Gourlay, CTO of DesignLED, gave a lecture about smart interior surface backlighting for personalization and an ultimate user experience.

Cars are the third living space (+ home, + office) with different functions and users, e.g., executive, family, and privacy. Therefore, fixed hardware must be personalized and interior light can be modified by software. Some examples for personalization user interaction scenarios:

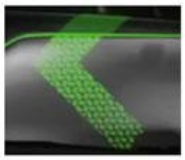
To integrate these technologies in the car interior, the smart backlighting requirements are:

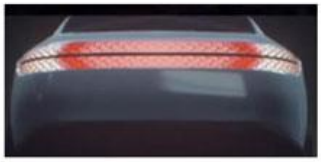
- thin (< 5mm) and curved systems with low tooling costs
- dynamic animation capability with small number of addressable LEDs
- edge to edge homogeneity with a surface luminance 100 – 1000 cd/m^2
- integration of sensors and light aligned with sensor functions
- varying LED density and dynamic RGB animation for transition from screen to trim

Dr. Gourley made a comparison between different backlighting solutions and explained, that the composites from DesignLED have some advantages regarding space, performance, power and costs over OLEDs, LCDs, direct-lit, edge-lit and molded solutions. He showed impressive examples and inspirations with his static and dynamic backlighting technology:




V A O





Light & Function Integrated Interiors, Supplier Landscape

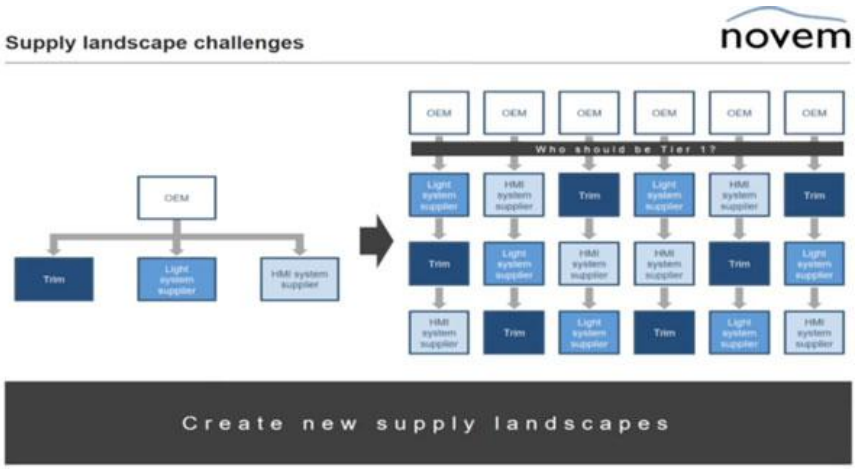
INTERIOR NEWS

Dr. Dominique Heilborn, Novem's R&D Director of Light and Function, introduced his company with 70+ years' experience with trim and function elements in premium vehicles, €646m turnover; 5,927 employees at 12 locations in Americas, Europe and Asia. Novem works with the full spectrum of materials like wood, aluminum, carbon, premium synthetics and many combinations for door trims, dashboard and center consoles. Light integration in car components comprises the conceptional phase, series implementation and production.

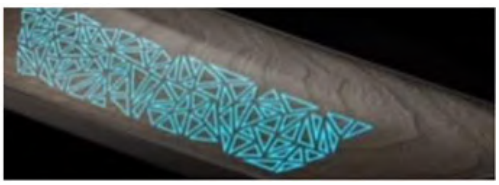
Dr. Heilborn said that for the next generation it is completely natural that you get all light colors in a car in the same easy way like in your smart phone or living room. All functions will be under control by combining physical and digital life. He foresees light and function integrated interiors like in the image below:

Dr. Heilborn explained that a large part of the added values will shift from the automakers to the suppliers and at the same time bigger platforms and a greater number of vehicles will be introduced to the market with a strategy for synergies. He said that a lot of automotive suppliers will die out within the next decade and new

ones will rise according to numerous economic studies. This is a great challenge for the supply landscape.



Two examples of light integrations in décor trims from Fa. Novem with hidden until lit effect



Smart Surfaces With Touch Sensors

INTERIOR NEWS

Dr. Wolfgang Clemens, Head of project management of PolyIC, presented in his lecture on HMI automotive trends, PolyIC as a Kurz Company, PolyTC touch sensors, smart HMI surfaces with touch sensors, products, use cases, decoration and light & function.

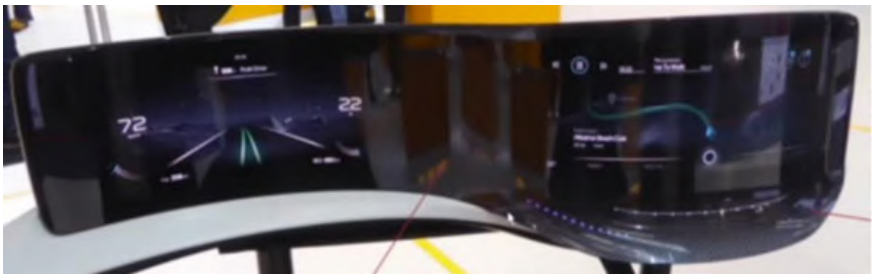
PolyIC was founded in 2003 as a joint venture between Siemens and Kurz. In 2010 it became 100% integral to Kurz, headquartered in Fürth, Germany. The focus of PolyIC is on engineering and product management, production, infrastructure and sales is done by Kurz, a global leader in thin-film technology for surface finishing, decoration, labelling and protection.

One trend in terms of automotive HMI: light & function are everywhere in the car interior, large, curved, seamless and shy-tech components with hidden until lit light features. Another trend: capacitive switches with active haptic feedback are everywhere and substitute the mechanical switches.

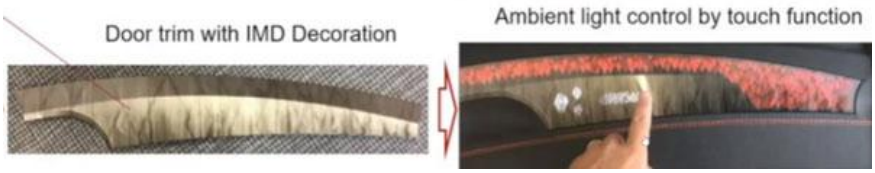
The touch sensors are manufactured in a roll-to-roll production with a PET substrate and silver metal mesh technology for a high electrical conductivity and optical quality. The sensors are thin, flexible and light weight with multiple integration options on a low-price level.

Case studies:

1. Seamless, curved, large and integrated instrument panel with an IMD top coat by Kurz and 3 touch silver sliders by PolyIC



2. Door trim with capacitive transparent touch sensors (3 buttons and 1 slider), IMD decoration with day / night effect and integrated active control of backlight.



3. HMI-Instrument panel (Red Dot winner 2020 for innovative products):

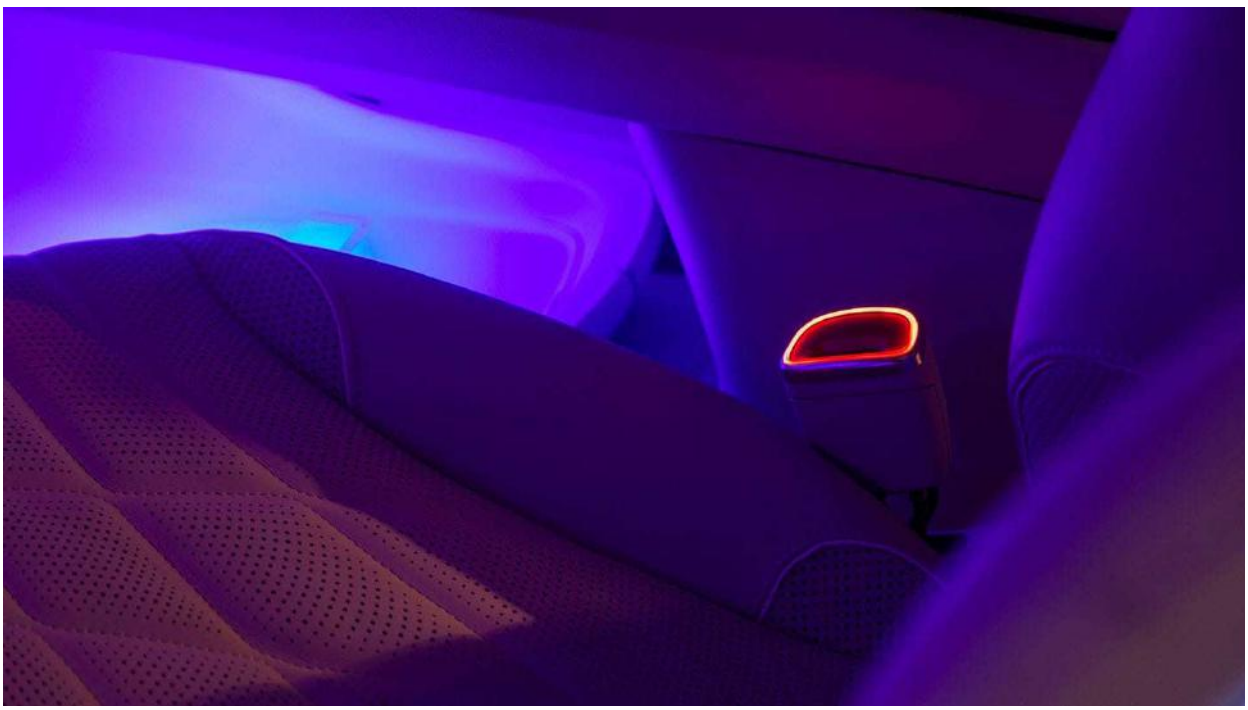
Organically shaped multicolor IMD decorated surface with shy-tech backlighting effects, seamless and transparent (PC mold) touchscreen area (> 90cm width), and hidden-until-lit buttons for intuitive active touch operation. The touchscreen sensor is integrated by IML or lamination, the buttons, slider and the capacitive proximity sensor by FFB or lamination.

Finally, Wolfgang Clemens, Director of Product Management & Business Development at PolyIC, gave a lecture titled "Innovative HMI panels with integrated touch sensors-shy-tech decoration for backlighting". Combination of decoration and light, using capacitive touch sensors with haptic feedback creates the new generation of HMI.

The Design Lounge

Mercedes EQS, Part II: Ambiance & Lighting

THE DESIGN LOUNGE



Lighting within the interior environment and specifically as used as an ambient and design element is relatively new within the automotive design realm. With the advent of LEDs and their lower costs and integration flexibility, they have become another element that designer can use to enhance and vary the ambiance of their interior designs. Mercedes has been at the forefront of this design movement.

MERCEDES EQS BASE-MODEL DISPLAYS/SCREENS/UX/HMI

MERCEDES EQS WITH THE OPTIONAL HYPERSCREEN

For example, the traditional sportive/performance atmosphere can be shown by using red lighting. Notice that the type of execution is influential. Indirect wash lighting from a hidden source that fades along the interior surfacing can highlight and contrast while a direct light source or piping creates a linear element that can tie-in visual elements.

Cyan color used above feels much more relaxing even though both the red and cyan light interiors have a dark/black colorway that includes the typically sporty suedelike material.

When used in conjunction with a white or light colored material, the color of a wash light dramatically alters the interior mood. Notice also that Mercedes uses a blue colored piping that harmonizes the display colors and the physical forms of the IP and doors, and the red-ringed seatbelt catches.

The use of piping to enhance the interior shapes is used on the upper front seats that separates the soft trim covers from the hard back panels. The use of different colors for the piping and wash lighting effects further emphasizes this effect.

Furthermore, the base color of the interior materials in conjunction with the lighting color pallet is another challenge for the interior and color & material designers and the LED technology allows for infinite color variations that can also be decided by the consumer regardless of the initial designer's intent.

Instead of a neutral white or grey base interior, tans and beige offer more of a challenge for the interior designers as the light color pallet is limiting. Notice the use of orange for the linear 'piping' elements and warmer blue for the 'wash' effect changes the warmth and ambiance compared with the purple and cyan color palette.

Seen by using only a cyan color palette on the monochrome suede material with both the wash lighting and piping activated changes the overall ambiance as on the door panel to IP interface. With the upper piping deactivated along with the lighter colored lower materials, a greater sense of depth and flow can be created.

Finally, using lighting to enhance design details and perceived quality is very effective when used discreetly. Mercedes integrates this into both the HVAC air outlets and the seatbelt buckle adding design depth and quality to both elements.

With the EQS, Mercedes is again leading the industry with their quality execution in the premium segments.

News Mobility

_Car interiors Unplugged

NEWS MOBILITY

IMAGE: CARSOPHY

16. Intelligent emotions_

(this story is part of an ongoing series introducing automotive interiors as an evolution of our habitat)

The future of mobility as depicted today, by super scalers and system integrators, is related to living-rooms on wheels with people in them texting messages, working while commuting or consuming 'digital products' throughout their journey. It all takes place within a flawless and fault proof, ecologic and safe, mobile grid-system that prevents accidents or even conflicts of interest between participants and surroundings. Design insiders allude that the new car interiors will draw inspirations from boutique hotels and lounges. Words such as personalization-through-modularity substitute anything to do with identity while car design will be geared towards creating in-vehicle experiences. Experiences that we will have to design, invent and produce in order to render interior spaces attractive. Never before in automotive history was necessary such attempt since there was no need. People were naturally fascinated, just because it was exiting! We all know a great one interior when we see one.

The ride itself was so exiting that the act alone created decades of mobile mythology, inspired dreams and fed imagination to some of the greatest narratives for the motion

picture industry. There was no reason to invent an attraction within, like now, in order to entertain the occupants during the most boring ride of their lives. After a saga 'in charge of mobility' we are now prospecting into the following scenario: An extension of our deskbound routine into a digital itinerant mall financed by the people in it. The only condition for this to work is that occupants have to keep consuming and produce information while moving. Car interiors are correlated to our anthropology and without being involved in the making of original motion, sedentary lifestyle takes over mobility.

Other than taking out the joy from the ride, it is not civically interesting to be in such place, where marketing entropy becomes so indiscreetly visible. The journey is not about interior designs but about the people in them, the feelings that this product will be associated with, and the emotions that it enhances.

Future mobility scenarios at the current state tend to sound a bit like coke Zero, sugar free maple syrup, or decaffeinated coffee. According to this marketing trend, the main character of the product is minimized or replaced artificially, substituted by its more marketable reproduction. Mobility however cannot exist without emotions, neither interiors without identity.

_to be continued…

_____*INDUSTRIOUS__*

Autonomous EV With DJI Drone Sensors

NEWS MOBILITY

DJI is a Chinese technology company headquartered in Shenzhen, Guangdong with manufacturing facilities throughout the world. DJI manufactures commercial drones. DJI accounts for around 70% of the world's consumer drone market as of Mach 2020!

Leaks are just as prevalent in the automotive world as in the drone's sector. And, the day before Shanghai's Auto Show, a DJI-related autonomous electric vehicle leak has occurred. It would make a lot of technology sense, for DJI to go to automated vehicle, as we could consider an autonomous vehicle as a terrestrial drone!

Is this company going to build vehicles? Actually, in China so many players from various technology and digital fields are dreaming of EVs! For DJI no official information, except they have apparently launched a division focused on hardware and software for autonomous EVs. Not a car, but the tech that helps them run…

General News

Blablacar Long Distance Carpooling Still Growing

GENERAL NEWS

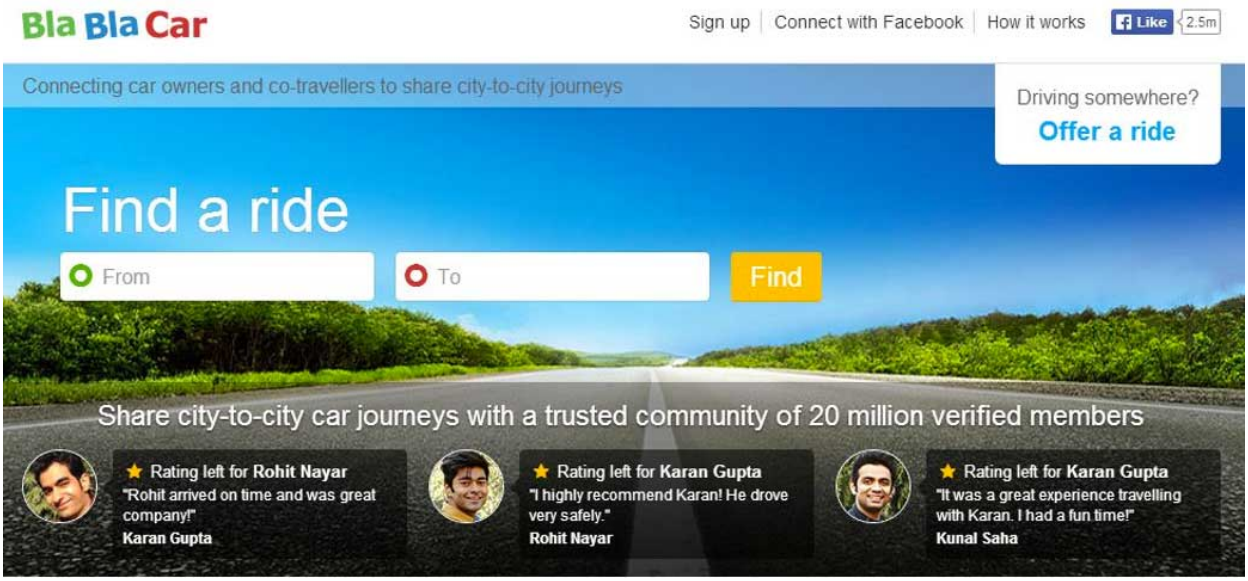


IMAGE: MEDIANAMA

BlaBlaCar, which offers both long-distance carpooling and intercity bus travel, said last week it had raised $115 million (€97 million) in fresh investment. Despite the pandemic, **BlaBlaCar**served 50 million passengers in 2020 (70m in 2019), The French startup has aggressive plans to create a rail service, debut a travel booking app for travelers, and expand its bus network much farther outside of Europe (just acquired Ukrainian intercity bus operator Octobus)

BlaBlaCar operates in 22 markets, and travel outside of Europe now accounts for more than half of its activity. It's seeing double-digit growth in bookings for carpool and bus compared to pre-crisis levels in markets outside of Europe, especially in Russia, Ukraine, Mexico, and (before a recent surge in coronavirus infections) Brazil. Since the end of 2018, it claims to have grown its "members" by about 45 percent to 90 million.

BlaBlaCar calls these people who drive as ambassadors – and books seats on their behalf prior to the trip. The travelers pay BlaBlaCar for the trip and in turn the company pays the drivers post the trip is complete after deducting a 12-15% fee on the total collected by BlaBlaCar for the cost of the ride from point A to point B.