Thu, 1 September 2022
Weekly Newsletter

DVN-I
Automotive Interior

NEWSLETTER #125

Editorial

HMI At DVN Interior Seminar This November

2020 ACURA RLX SPORT HYBRID (HONDA IMAGE)

As physical buttons are being systematically wiped out by bigger and bigger touchscreens, downsides and risks are beginning to show themselves in term of safety. It seems touchscreens might not be a very good HMI as long as human drivers exist; the screens appear to take too much time and attention to operate. This serious topic is on the agenda of the upcoming DVN Interior Think Tank seminar, set for 28-29 November in Köln. The whole docket for the event will be published within the next two weeks' time.

This week's In-Depth revisits the Vi Bilägare touchscreens-versus-buttons test we reported on last week, with analytical food for thought and improvement planning. We also bring you coverage of lightweighting, an ongoing major challenge for the whole of the automotive industry. We've been keeping on top of this for you, bringing endless news on related matters; this week you get information about polyurethane and foam molding; acoustic patch laminates; thin seats; new rear seatbacks and center consoles; instrument panel-airbag integration…a giant diversity of car interior components and areas under detailed scrutiny for mass reduction. Again, it's a major sustainability topic, and remains on the DVN Newsletter agenda.

Stay tuned, and save the date—again, that's 28-29 November. Not yet a member? come join in.

Sincerely yours,

Philippe Aumont
General Editor, DVN-Interior

In Depth Interior Technology

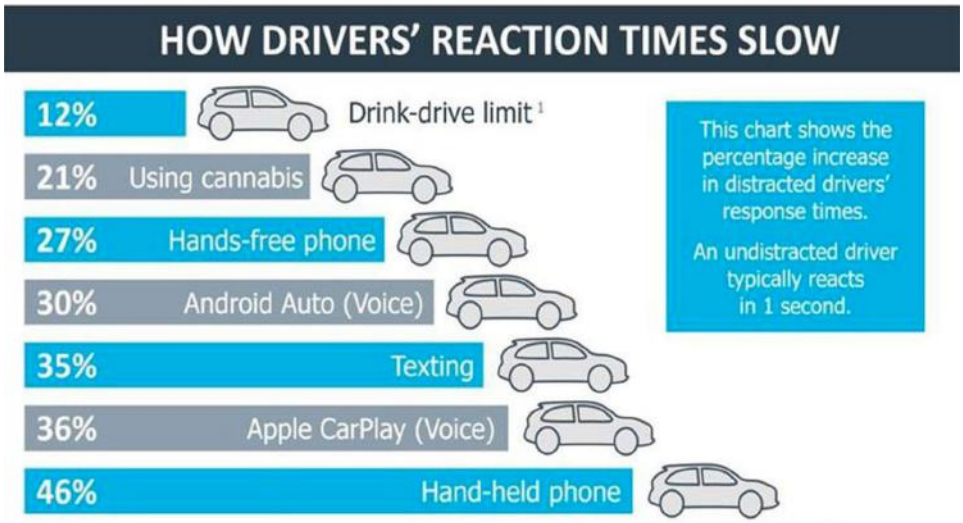
Are Physical Controls Better Than Touchscreens?

GLENN LINDBERG IMAGE VIA VI BILÄGARE

Physical buttons; knobs; levers, and dials are increasingly rare in modern cars. Most manufacturers are switching to touchscreens. DVN Interior is constantly publishing news illustrating this trend. But are screen-dominant (or screen-exclusive) human-machine interfaces really a good thing? Is the 'rolling mobile phone' model really the right way to do it? Doubts are cropping up.

VNC AUTOMOTIVE IMAGE

Touchscreens are getting bigger and bigger while physical controls are being scraped off and scrubbed away—Tesla kind of started it with insistence from the start that all control shall be through a touchscreen. There's increasing evidence that's the wrong way to do it; this past May we **published** a piece on software company VNC, who have found that the race towards giant driver-focused touchscreens deprives users of the best in-car experience. According to VNC, the wholesale replacement of physical controls by touchscreen interfaces is alienating customers; compromising safety, and attracting action by regulators.



IAM ROADSMART CHART

Last Spring we **reported on** research findings in a study done coöperatively by the British Transport Research Laboratory and road safety charity IAM Roadsmart, which found drivers take their eyes off the road for up to 20 seconds when asked to play a track from Spotify using a touchscreen interface—long enough to travel over half a kilometer at 113 km/h. What's worse, while doing so, drivers failed to maintain their lane position or respond appropriately to a simulated emergency. All in all, reaction times increased by as much as 57 per cent. That compares very badly to driving with a blood alcohol level just over limit, which worsens reaction times by 12 per cent. Beyond that, drivers are increasingly fed up with having to use the touchscreen—that is if it is **still working**—to do anything and everything, and with the European Commission estimating that driver distraction is a factor in up to 30 per cent of crashes, regulators and legislators will likely be compelled to do something about it.

And last week, we **brought you results** from a Swedish auto magazine study comparing physical and touchscreen controls. Their research methods seem sound, and their conclusion is basically that compared to physical controls, even the best touchscreens force the driver to divert much more attention for a much longer time. Nevertheless, screens in new vehicle keep getting bigger—the 'rolling smartphone' design philosophy—and physical controls keep getting fewer. Designers want a ”clean” interior with minimal switchgear, and vehicle program chief wants to lower the cost. Instead of developing, manufacturing and keeping physical buttons in stock for years to come, automakers are keen on integrating more functions into a digital screen which can be updated over time.

All of those are reasonable goals, in theory. In practice, though? Well, the worst-performing car in those Swedish tests hijacked the driver's attention for 1,400 meters to perform the same tasks for which the best-performing car—an old 2005 Volvo, the only one in the test group with no touchscreen—needed just 300 meters. It's not an anomaly or a one-off, either, and it's not a sudden change; a major research study done by the AAA Foundation for Traffic Safety **reached similar conclusions** five years ago. And touchscreens are evidently **especially dangerous** for older drivers, which is inconvenient given the steady increase in older drivers and the growing awareness that their needs must be catered for.

The thing about physical controls is that thoughtfully-designed ones can be operated by feel, without any need to take eyes off the road. That's why the heavy-hitter likes of **Psychology Today** and **Ars Technica** have looked long, deep, and hard at this question, and at least one automaker—Mazda—has **shown** some hesitance, apparently well founded, to jump on the touchscreen bandwagon, at least not with both feet.

What can you do with a touchscreen?

Tesla was notthe first to introduce a touchscreen, but has always offered bigger touchscreens than most manufacturers, controlling more and more of the car’s functions and features. Even the windshield wipers are controlled through the touchscreen.

The BMW iX also offers a touchscreen, but not as big as Tesla’s, and it's augmented with more physical buttons. But that’s no guarantee of an easy-to-use system; the BMW’s infotainment system has lots of features, but it also has one of the most complex and complicated user interfaces ever designed.

And take a look at Volkswagen and SEAT: the touch-sensitive climate controls below the screen in the ID.3 and Leon are not backlit, which makes them completely invisible at night.

Is voice control a solution?

Automakers arekeen to point out that many features now can be activated by voice. But the voice control systems are not always easy to use; they can't control every function, and they don't always work as advertised —artificial intelligence gives way to artificial dull-wittedness when faced with the wide range of human accents and speaking styles.

Ten years ago, Tactus Technology **devised** "dynamic" haptic touchscreens which extrude actual, real, physical protuberances—pushbuttons, levers, sliders, or whatever which other shape—that actually work and give tactile feedback just like a hard, physical control. This adds a tangible, 3-dimensional tactile element to what has formerly been a resolutely planar, entirely visual interface. The key is a deformable surface which raises physical buttons on the touchscreen. When they're not needed, the buttons disappear into the touch screen, leaving it perfectly flat.

Knob-on-display: best of both worlds?

MICROCHIP TECHNOLOGY IMAGE

Perhaps a good balance can be found between pure-touchscreen user interfaces and tangible, movable controls. One approach is that of Arizona-based Microchip Technology, with their MaxTouch Knob on Display (KoD) family of touchscreen controllers. The technology enables the mounting of a knob directly onto a display without an opening in the panel, or any customization of the touch pattern, increasing design flexibility and system cost savings. And we've reported previously on the **Ford/Preh solution**, presented at the DVN Interior Workshop in Köln.

PREH ROTARY BUTTON IN FORD MUSTANG MACH E (PREH IMAGE)

Think Tank Seminars for DVN Interior members

After two years of no contact because of the pandemic, the DVN Interior community met at the Köln Workshop this past April. The workshop was a tremendous opportunity to meet and to catch up on the latest interior technologies. In between the yearly big workshops, we now offer smaller "think tank" seminars about problems concerning the whole interior business. The smaller format favors deeper discussions amongst participants, and will bring another perspective compared to more formal lectures.

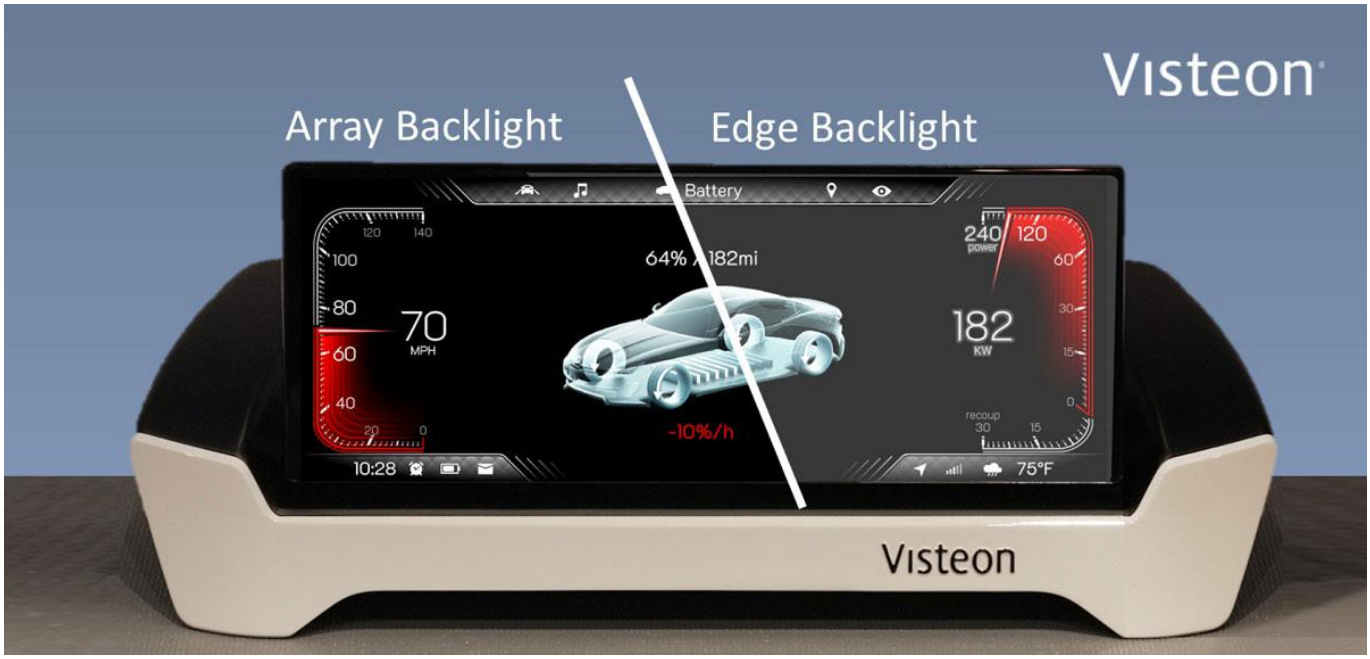
Topic: HMI

Driver distraction and mental overload are big issues because of the many interactions that technology has brought into the car. That makes it important to talk about the more and bigger touchscreens; HUDs; fancy interior lighting and alert systems; voice and gestural controls; functional surfaces, DOMS (driver and occupant monitoring systems), and other suchlike, which is why this constellation of topics i to be a central rubric of this November's DVN Interior Think Tank seminar.

Interior News

Visteon's High-Contrast, Low-Power Automotive Display

INTERIOR NEWS



VISTEON IMAGE

Visteon's new display technology dynamically improves the contrast ratio of vehicle displays. It uses proprietary advanced algorithms to control the full-array local dimming display. A matrixed array of LEDs behind the image plane are individually controlled to deliver luminance where needed, optimize pure-black content, and drastically reduce power requirements.

The Visteon Local Dimming technology works with thin and curved screens as well as thin border display designs. The company notes that optical benefits include a higher perceptual display quality with minimized halo effect. Because the system requires fewer LED zones, power consumption can decrease by 70 per cent compared with other technologies. The production-ready solution is compatible with electric vehicle systems and with other advanced display technologies offered by Visteon, such as Active Privacy and TrueColor Image Enhancement.

The system controls the display dynamics based on the image content. An algorithm directs the underlying LEDs to be brighter in regions with bright content or to be very dim or off behind regions of the screen with dark or black content. This dynamic back-lighting layer delivers a tenfold increase in the contrast of the display (from 1,000:1 to 10,000:1). Significant power savings are an additional benefit of the LED control algorithm, which continually calculates optimal luminance requirements.

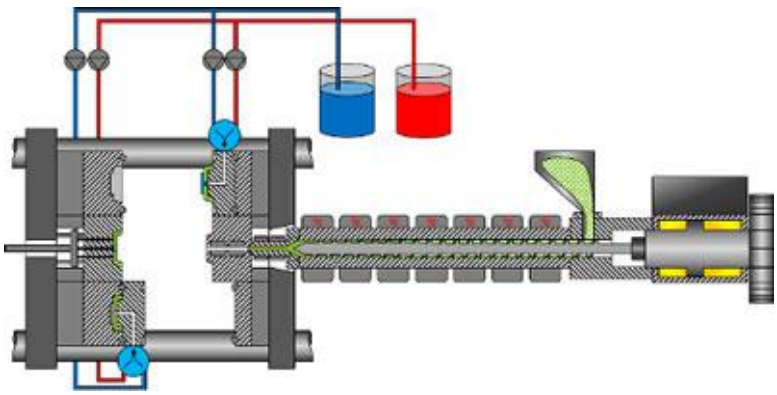
Qais Sharif, global VP of Visteon’s display product line, says “The market is increasingly seeking high-perceptual-quality displays and reduced power solutions. Our unique local dimming solution improves the contrast ratio at a more affordable price than premium solutions and provides significant reductions in power consumption. This technology leads to high perceptual quality in affordable displays that use less power. Visteon’s expertise in both display optics and algorithms enables us to excel in this technology category. The Visteon Local Dimming systemic approach balances system cost, contrast improvement and image halo management”.

Yizumi's Lightweight PU and Foam Molding Solutions

INTERIOR NEWS

YIZUMI IMAGE

Established in 2002, Guangdong Yizumi Precision Machinery is a Chinese company focusing on design; R&D; manufacturing; sales, and service of injection molding machines; die casting machines; rubber injection machines; high-speed packaging systems; automated robotic systems, and precision molds. An R&D center was established in 2017 in Germany at Aachen University.



INPUR MOLD CONCEPT (YIZUMI IMAGE)

With an eye on the changing nature of the automotive market and the emergence of BEV and other zero-emission vehicles, Yizumi developed their ReactPro Solution, which they say combines the advantages of polyurethane coating and injection molding to increase productivity by producing high-quality thermoplastic parts and coating functional surfaces with polyurethane in the same production cell, improving both the tactile quality of these parts while also cutting cost. The company has also developed new solutions for physical and chemical foam molding processes, which they say enable the production of lighter-weight parts.

Their chemical foam molding process, FoamPro—the first technical solution launched by Yizium's New Materials and Processes Test Center—is based on detailed research into MuCell technology. The claimed benefits include reducing part weight by 20 per cent and the clamping force during production by 50 per cent, a 30-per-cent shorter cycle time, and the elimination of warp and shrinkage.

The company also offers thixomolding machines, which enable the production of magnesium parts using an injection-based process. This uses chipped magnesium alloy as raw material, which is directly delivered to the machine via hopper to the barrel. The process needs no furnace, ladler, or shielding gas. Thixomolded magnesium parts have long been a dream of seat engineers for their low mass, but none has been commercialized…yet!

Altair Enlighten Award Winners

INTERIOR NEWS

SHILOHCORE STEEL APL (SHILOH IMAGE)

Adient; Yanfeng; Shiloh Industries; General Motors; Toyota, and BASF are among the winners of the Altair Enlighten awards. Presented annually in conjunction with the CAR Management Briefing Seminars in Traverse City, Michigan, the award honors the year's greatest achievements in vehicle weight savings.

Altair is an expert company in computational science and artificial intelligence. They provide software and cloud solutions in simulation, high-performance computing, data analytics, and AI. Lightweighting is a major challenge of the automotive industry, as a key lever for lower impact vehicles, no matter whether powered by petrol or volts. Here's how the awards relate to interior componentry:

Shiloh Industries (Valley City, Ohio, USA) is an Enabling Technology winner, together with GM, for ShilohCore acoustic patch laminate (APL). Its NVH-damping performance functions comparably to a fully laminated vehicle material, but with lower mass; carbon emissions, and costs. Damping performance can be tailored to achieve required temperature ranges and target frequencies, while maintaining vehicle fuel efficiency and reducing raw material usage.

Adient is a Future of Lightweighting winner, with their ultra-thin automotive seats made of reinforced thermoplastic elastomers panels. UltraThin's design saves space and reduces mass; labor; time spent in assembly, and materials and part count.

Yanfeng is an Future of Lightweighting winner, with their Instrument Panel and Passenger Air Bag (IP PAB) Integration. The IP PAB integration combines the chute and airbag module housing into one part to lower costs and creates synergies in the development process. Through material substitution and a 23-per-cent mass reduction, the system halves the product's carbon footprint.

Mindtronic DMS Extended to Driver's Instant Interest

INTERIOR NEWS

MINDTRONIC IMAGE

Taiwan-based startup Mindtronic AI has detailed what they're calling the world's first automotive meta-service, a biometric sensing technology that provides instant access to any visible object in the real world. It has been developed as a kind of by-product of Driver Monitoring (DMS) technology.

"Originally, we just made our biometric sensing technology on the road for monitoring drivers' drowsiness. Today we push it further to infer drivers' interest by analyzing their behaviors", said Sharon Jiang, CEO of Mindtronic AI. "The service of future mobility is transformed from physical mobility to data mobility, and the car becomes more intelligent than ever to provide passenger services proactively!"

Mindtronic AI has partnered with V2X Network, an autonomous transaction platform for the mobility ecosystem, allowing their Meta-Service to learn drivers' patterns via biometric sensing. The startup says this can precisely predict a driver's current instant interest, connecting the internet and local services into one combined metaverse. In addition to the meta-service, Mindtronic AI has been working on their automotive-grade designs built with edge-based AI deep learning for both cockpit design and sub-systems.

The company suggests there is great potential for 3D immersive bio-interactive UI, with Mindtronic AI's NOAH system offering a 3D digital cluster with embedded facial recognition and DMS. This can be further enhanced with a cockpit upgraded with an AI domain controller under the Dirigent system, and at the center of it all is its DMX ADAS.

Bentley Mulliner Batur: Sustainability to Match EV Approach

INTERIOR NEWS

BENTLEY IMAGES

Bentley gives a preview of the possible future design of its BEVs. The two-seat interior space of the Batur is designed for ultimate personalization and long-distance grand touring. Inspired by the success of the interior design of the Bacalar, the Batur builds on the core elements of the Bacalar's cabin design and adds new sustainable luxury features.

Clients can choose from a variety of sustainable interior materials, including low-carbon leather sourced from Scotland, sustainable tannage leather from Italy, in five different colors, and Dinamica, a suedelike **leather alternative**.

The range of veneers available for the fascias include a new material for Bentley: natural fiber composite, which is a sustainable alternative to carbon fiber. Available as a 2 × 2 twill weave and finished in satin lacquer, the natural fiber composite brings a new sustainable texture to the cabin. Regardless of the veneer chosen, the passenger fascia panel is finished with a unique etching of the audio signature of the W12 engine.

The final sustainable elements are the carpets, which are matched to the leather and made from recycled yarn, in a first for Bentley.

Buyers will choose between bright or dark treatments to the interior light and titanium options are also available. Certain controls, like the organ stops for ventilation, are even available in 3D-printed 18K gold.

The interior of the launch Batur has been trimmed by hand in a combination of black, red and orange - specifically, Beluga, Hotspur and Hyperactive. Beluga main hide is contrasted with new, even more sustainable, low-CO_2 Mulliner Hyperactive Orange leather. A complementary texture is provided through the use of Dinamica, in both Beluga and Hotspur. "Batur Chevrons" to the outer wings of the seats are finely embroidered by hand in Snap Orange thread, whilst the remainder of the upholstery carries a white thread in contrast throughout. The soft elements are completed with a new feathered artisan piping in Beluga, with Hyperactive Orange piping to the seat centers and a Hyperactive Orange finish to the lower spoke of the steering wheel.

The veneers to the instrument panel, fascias, and doors are done in glossy black paint, with a 'guitar fade' to Fine Brodgar that flows from the fascias to the doors, before fading back to black. The metallic elements of the interior are a blend of black anodized aluminum and satin titanium, completed with a hallmarked 18 karat gold Bentley Dynamic Drive Selector and '12 o'clock' steering wheel center band.

Avatr 11: Big EV Buzz from Changan, Huawei, CATL

INTERIOR NEWS

CHANGAN AUTO IMAGES

It's been a long time since the market launch of a new e-car in China generated as much interest as this one. For the new all-electric SUV "Avatr", which has been on sale in China for a couple of weeks, three companies have joined forces: Changan Auto, Huawei and CATL. It is this cooperation of three ambitious companies that is generating a disproportionate "buzz" right now.

Three lidar sensors from Huawei are installed in the car. Plus, six millimeter-wave radars, twelve ultrasonic sensors and 13 cameras. Computing power is 400 TOPS, according to the companies.

The Avatr 011 MMV is a special edition of the 11, designed in collaboration with Matthew M Williams, designer at Givenchy, a luxury fashion brand. This edition has black coloring everywhere around the car's body and interior. Avatr limited it to 500 copies. The Avatr 011 MMV has been strangely unveiled ahead of the standard model.

There are three screens for a driver and a passenger in the center of the Avatr 11. The main screen is floating with a diameter of 15.6”. The HarmonyOS from Huawei powers it. Voice and gesture control are some benefits of this system. Two other screens are 10.25”. One of them is in front of a driver, and another is in front of a passenger. The center tunnel has a huge wireless charging pad for two phones and hidden cup holders. There is a spacious room under it. The steering wheel of the 11 is oval-shaped and sporty.

Avatr 11 has two different seat layouts. The top trim level has four seats with a huge center console acting as an armrest. It comprises a small screen, a wireless charging pad, a roomy compartment, and a refrigerator. There are two independent seats with a sporty look. As for the cheaper versions of the 11, they got a five-seat layout with a bench on the second row.

Another feature of the Avatr 11 is its sound system. It comprises 14 speakers and a 12-channel power amplifier. It is also equipped with RNC (Road Noise Cancellation) and ASE (Active Sound Enhancement) systems.

The Design Lounge

Mini Aceman Concept: Charismatic Simplicity

THE DESIGN LOUNGE

MINI IMAGES

Mini has announced a completely new generation of vehicles. The Aceman study now shows the direction in which the design is heading and what can be expected technologically. The "Charismatic Simplicity" design concept stands for a focus on the typical Mini features.

The interior of the Aceman is dominated by a reduced design with clear forms and sustainable materials. The dashboard extends across the entire width of the interior as a flat design element in the style of a sound bar. For the first time, the central instrument is a fully round OLED display. Below it is the classic toggle switch bar. The study thus combines digital technology with traditional design features of the Mini brand.

The user interface of the central instrument features a new graphic display. In the production vehicle, the display and control system will be based on the latest generation of the Mini Operating System. One highlight is the display area that extends beyond the central instrument. With the help of moving image projections, the content of the operating system can be transferred to the entire dashboard, creating a digital experience that extends into the door panels.

Physical Versus Digital : Peugeot 3008 i-Cockpit

THE DESIGN LOUNGE

PEUGEOT 3008 I (PEUGEOT IMAGE)

COFFEE CORNER
DVN
Interior

One cannot survive 200 years without being an innovator. Peugeot, the world's oldest car brand in existence, for its bicentennial anniversary in 2010, gave its design department a real challenge for the years to come: 'to recreate the brand through its history'. While celebration model SR1 side panels were designed/sculpted to symbolize and revive the long-lasting legacy of metal stamping, the cockpit oriented interior acclaimed the brand legacy of rally driving (group B, WRC, Dakar, Le Mans) with a clear intention to a very assertive style.

From 2010 onwards, and while all the design genes of the next Peugeot era are expressed on the drawing board and the new line up is planned, upcoming screen technologies are entirely changing the interface of the vehicle, acting though as a disconnection screen of anything analog we could rely on, directly connecting us to motion. This performing and versatile 'layer of technology', somehow cognitive-neutral in physical terms yet highly adaptable, is directly opposing any tactile feeling, experienced as soft, hard, warm and cold, a universe not only to be looked at but also to be felt.

New vocabulary was created among the creative actors to tackle the issue, such as 'phygital' (physical + digital). The first and most successful production vehicle that came out of this reflection, the Peugeot 3008, was a real challenge to transform what is cold and aseptic into an emotional relationship to technology.

Peugeot's signature i-Cockpit design definitely creates an enhanced driving experience, designed with meticulous attention to what would be defined as virtual 3D detail. However, the high-definition color screen is accompanied by a series of seven physical elegant piano keys – the "toggle switches" – that work in conjunction allowing direct and permanent access to the main comfort functions: radio, air conditioning, 3D connected navigation with voice command, vehicle settings, telephone, mobile applications and hazard warning lights. The Design of the satin chrome toggle switches under the central touch screen was inspired by the world of aviation, providing a unique touch to the striking cockpit design. And with perfect weighting and damping, each switch is a work of art.

Physical versus digital: we always remain stunned on their will of coexistence in the domain of car interiors. In the particular Peugeot story, the identity of a function is synonymous to the identity of the brand.

News Mobility

Mira's Remote-Control Technology

NEWS MOBILITY

MIRA IMAGE

The Düsseldorf, Germany-based technology group Rheinmetall is founding a subsidiary called Mira. The startup will develop remote control of vehicles on public roads. The goal: a more sustainable and productive logistics and transport industry.

Visual information on the current traffic situation, transmitted via a 4G/5G mobile network, is intended to enable safe remote control of the vehicle. The technology is said to be suitable for diverse applications: such as on-demand shuttles, on-demand delivery and return of sharing vehicles, or monitoring and controlling driverless vehicles in large fleets. According to Mira, teleoperation lends itself to two use cases in particular.

Teleoperation for self-driving vehicles

The teleoperator supports a self-driving, driverless vehicle in the event of a problem. This means that it takes over vehicle control in the event of a system failure or an unsolvable driving task, for example. Either the driver decides on an alternative route suggested by the vehicle; or they directly takes over vehicle control—steering, braking, accelerating—and then hands over again to the automated vehicle. Teleoperation can thus fulfill the legal requirement for technical supervision of autonomous driving vehicles.

Teleoperation of non-autonomous driving vehicles:

The teleoperator guides a driverless vehicle continuously and directly from a driving position. This allows vehicles to be driven over longer distances, for example in logistics or first/last mile applications. Delivery of vehicles, such as rental cars or car-sharing vehicles, is also conceivable.

Initial testing of the technology will take place in Düsseldorf's industrial port. Here, Mira wants to demonstrate and evaluate realistic customer business models. The company says it already offers StVZO-compliant teleoperation technology for use in passenger cars, commercial and special vehicles.

The pilot project is supported by the approval authorities of the district government, the city of Düsseldorf and TÜV Rheinland. According to the startup, further areas of application are being prepared.

It could be considered as an extension of what is already existing to monitor automatic metro or train lines.

Baidu, Apollo Launch Robotaxis With No Safety Drivers

NEWS MOBILITY

BAIDU IMAGE

Baidu is allowed to use driverless robot cabs on public roads in two Chinese cities. Accordingly, Baidu's autonomous ridehailing service Apollo Go can now transport people without a safety driver in the megacities of Chongqing and Wuhan. In a statement, Baidu called it a "turning point for the future of mobility in China."

Initially, the company plans to deploy five robot cabs in each of the two cities. They will be allowed to drive in defined areas. Accordingly, the vehicles in Wuhan will be on the road in an area covering 13 km² between 9 a.m. and 5 p.m. in the evening. In Chongqing, the area covers 30 km². There, the autonomous ridehailing service can be used from 9:30 a.m. to 4:30 p.m.

Both cities had previously supported autonomous driving with infrastructure projects and also created legal frameworks. At the same time, Baidu had gone through testing and licensing stages leading up to the permission now announced. These included test drives with a safety operator in the driver's seat and rides with an operator as a passenger.

Baidu subsidiary Apollo Go is also operating in China's other major cities: Beijing, Shanghai, Guangzhou and Shenzhen. It has handled over one million rides in ten cities where it offers ridehailing since 2020. According to Reuters, Baidu is now also talking to local governments in Beijing, Shanghai and Shenzhen about deploying driverless robot cabs. Tests are already underway in Beijing, with an operator still positioned in the passenger seat.

General News

Chinese Models Surging to Europe

GENERAL NEWS

BYD IMAGE

Chinese automaker like BYD, Geely, and Great Wall are pushing into Europe. They want to conquer the EV segment with high ranges. Following in the footsteps of BYD, the Great Wall Group has now also announced that it will be bringing some models to Europe as early as this year. The Chinese have entered into a cooperation agreement with the Emil Frey Group, one of Europe's largest car dealers.

The BYD Tang shows what this could look like. The SUV has been available in Norway since the beginning of 2021, but is still scheduled to arrive in Germany this year. The Chinese are still keeping a low profile on the price.

However, at €57,760, the model is by no means a bargain in Norway.

BYD IMAGE

The Seal is to occupy the middle class for BYD. The entry-level variant of the sedan with 204 hp is significantly cheaper than a Tesla Model 3 at the equivalent of €32,000, at least in the Chinese home market. With the optional larger 83 kWh battery, the long-range variant is said to give a range of 700 kilometers. Germany is to become one of the first European markets for the model. It is expected that the Seal will be available for order before the end of the year.

MG IMAGES

The former traditional British brand MG has belonged to the Chinese car giant SAIC for some years and is currently celebrating a comeback in Europe with electric cars. Models such as the MG5 and the MG ZS EV

ensured that the company sold more cars in Germany in the first half of the year than brands such as Honda or Jaguar. With fast loading times and lots of extras, the company wants to challenge the Germans in the Golf class. The MG4 is scheduled to hit the German market at the end of 2022.

NIO IMAGE

The Chinese manufacturer wants to compete with the premium brands: The brand's flagship is to compete against the Tesla Model S and the Porsche Taycan. This is to be helped not only by a powerful system output of 648 hp, which accelerates the car from zero to 100 in 3.9 seconds. The manufacturer plans to install a production-ready solid-state battery for the first time - a technology that other manufacturers are still fine-tuning. German customers will probably have to wait until 2024 for the top version of the electric car.

Great Wall plans to launch a cuddly compact car in Europe before the end of 2022, the ORA cat. In 2021, the Chinese premium brand from Great Wall dared to make a grand entrance at the IAA in Munich and unveiled the Coffee 01. The Chinese don't want to take much longer with the market entry in Europe. The Wey Coffee 01 is to establish itself in the upper mid-range. XPeng G3 and P7, the compact SUV from Xiaopeng Motors is also already available in Norway. The Zeekr 001, by Geely, which premiered under the name Lynk Zero Concept, could come to Europe in 2023.

Geneva Motor Show 2023 Only in Qatar

GENERAL NEWS

DVN IMAGE

What was once the first major European auto show of the year took place for the last time in 2019. Next year, too, the halls of the Palexpo site in Geneva will remain empty. In a statement, the organizers cite "uncertainties in the global economy and geopolitical situation" and "risks associated with the development of the pandemic" as reasons for the renewed cancellation.

Instead, the show, officially called the Geneva International Motor Show (GIMS), will be held exclusively in Qatar next year. The original plan was to hold the GIMS in 2023 in two editions: the first in February 2023 in Geneva, the second for the first time in November in Doha, Qatar.

Due to a pandemic, the traditional exhibitions had to be canceled at short notice in 2020 and were also cancelled in 2021. In 2022, the chip crisis was added to the mix, so many automakers refrained from participating. The show was canceled again.

Irrespective of this, the traditional car shows such as the IAA or the NAIAS in Detroit have recently had to contend with dwindling interest from visitors and exhibitors. More and more car manufacturers were relying on other concepts to attract customers. Climate activists, on the other hand, have recently used the events as a venue for protests.

Smaller trade shows like those in Barcelona or Leipzig have long been history. The big exhibitions are trying out new concepts. The last IAA, for example, was held in Munich for the first time - with a strong focus on new forms of mobility and booths throughout the city. Paris Motor show will come back with a new concept this fall; Tokyo is still wondering whether a technology show would replace automotive only. Only in China does the classic concept of car shows still seem to work as usual.