



## Driving the cockpit revolution – Q&A with Visteon CEO

By Matthew Beecham | 18 January 2021



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Forget what is under the hood, the battleground has shifted to what is inside the cockpit. Market leader Visteon has developed lots of cool new technologies to augment the cockpit electronics space, including large, curved, automotive-grade displays and its microZone technology that offers higher graphics performance than traditional LCD displays. To learn more, Matthew Beecham caught up with Sachin Lawande, President and CEO of Visteon.

**In terms of digital clusters, audio infotainment and displays, which are showing the fastest growth rates and what are the reasons for that?**

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We continue to see progression from traditional analog products to next-generation digital solutions across the automotive cockpit. Digital clusters, for example, now represent almost half of Visteon's total sales in the segment, almost doubling year-over-year customer orders. Business has been particularly strong with PSA, Renault and Daimler.

Our customers want to deliver the same technology to drivers and passengers that they are used to enjoying on their smartphones and touchscreen tablets, while establishing safe parameters for drivers to navigate screens without excessive distraction. As a result of this trend, there is high demand for larger

centre information displays and multi-displays in cabins, and our sales within this space grew 12 percent year over year in 2020.

For example, we worked with Volkswagen to jointly develop the pioneering infotainment system, VW Play, for the new Nivus model in Brazil. VW Play includes a diverse range of connectivity elements as well as key vehicle information and application notifications to deliver a premium user experience. The system offers high-resolution screen and video resolution, split screen functionality with user personalisation and rear camera capabilities. We built VW Play for convenience and accessibility by all vehicle occupants and plan to make it available to other models around the world.

### **What are Visteon's aspirations in terms of growing share in the Android-based infotainment market?**

A high-performance infotainment system offers the potential to realise our vision of connected driving. Most current in-vehicle infotainment systems have a limited variety of apps that can be brought in from a phone. Usability is often constricted by small displays, disabled functionalities and poor scaling of screen projection – all contributing to a poor user experience.

Android has emerged from a crowd of competitors to deliver the ultimate smart solution for the industry. Coupled with Visteon's capable, customisable and efficient infotainment platform, the Android system's versatility and flexibility meets a wide range of in-car requirements. We launched our platform-based system operating on the latest version of Android OS with Volkswagen Brazil in April 2020. This solution carries a huge collection of downloadable apps and in-car voice assistant that can be extended to any display size and cockpit complexity.

### **What sets Visteon's infotainment solution apart from competitors?**

Visteon offers an integrated Android-based solution that delivers a user-centric experience. In addition to adding Android apps to our platform, we refined, scaled and adapted standard Android apps for in-vehicle use. For every app, we optimised the interface to prevent distorted scale or low-resolution visuals. We also enabled most functionalities to be accessed both through soft keys and steering wheel buttons, allowing drivers to interact safely with the apps while also keeping their eyes on the road. We will continue to make improvements and upgrade the driving experience – and advance our goal of delivering the kind of smart driving systems we have promised and the industry needs for the future. Ultimately, we aim to establish Visteon's long-term leadership position in the infotainment segment. We plan to launch Android infotainment systems globally during the next two years.

### **The cockpit is becoming a display-driven environment. What do you see happening there? i.e. more of them? Curved? Wider from pillar to pillar?**

The cockpit is evolving to a fully digital environment with multiple curved, flexible displays that show information about the driving environment, vehicle dynamics and safety as well as connected multimedia content. This transition requires the development of several new technologies to enhance the complete driving experience.

### **What role has Visteon played in this transition?**

During the past 15-20 years, the automotive display segment has delivered some of the most creative product ideas as designers, suppliers and OEMs try to achieve the optimum in-car user experience for all passengers. Consumers expect next-generation cockpit displays to have optical performance that is competitive with mobile devices.

In the past year, Visteon has redefined the industry's parameters by introducing innovative, intuitive display solutions built with pioneering and state-of-the-art shape, style and performance. Our breakthrough microZone display technology offers significantly higher graphics performance than traditional LCD displays. This new, patent-pending high-dynamic range display technology offers high contrast, brightness and wide color gamut that enable automotive displays to achieve parity with consumer mobile devices offering life-like imaging capability. Designed to accelerate the development and commercialisation of more energy-efficient, cost-effective digital display solutions, microZone is considered to be the first automotive display to offer superior optical performance without sacrificing reliability.

**We understand that Visteon is moving toward a platform-based approach to product development. How is that progressing, and what will it mean for your business?**

The shift to software platforms for digital clusters and infotainment, combined with our technology leadership, is key to ensuring we are well positioned to address near-term challenges and generate consistent business success. During the past year, we have conducted in-depth assessments of Visteon's capabilities, core strengths and other areas requiring improvement. We have also made organisational and talent-related changes to ensure effective alignment with the platform-based approach. Structural modifications focusing on platform software core development and platform integration, testing and delivery are in place. Now, we will concentrate on strengthening the platform organisation, building new capabilities to improve effectiveness, addressing critical areas and increasing the alignment of the platform group with customers.

**Visteon recently won a contract to supply wireless battery management systems for GM, marking its first major win. Could you elaborate on what this means for your business?**

Electric vehicles are selling very well, especially in Europe due to government incentives and tightening emissions requirements, and also in China where sales of EVs have started to pick up again. The growth in market share of EVs is expected to continue, and by 2030 EVs are expected to represent about a fourth of the total market.

Visteon is in a good position to leverage this trend. Our cockpit electronics products, such as digital clusters, infotainment and SmartCore, are powertrain agnostic and can work seamlessly for EVs as well as traditional vehicles. Our new MicroZone display technology is ideal for high-quality automotive displays but without paying a price in higher power consumption.

In October 2020, we announced a first production intent, completely wireless battery management system (BMS) to monitor battery packs continuously for state of health and charge. GM is the first OEM to equip its EVs with the systems solution it has worked on in tandem with Visteon.

We are working with GM to introduce this solution on all planned EV models powered by their Ultium batteries. The wireless BMS system will help ensure the scalability of Ultium batteries across GM's future lineup, covering all brands and vehicle segments, from heavy-duty trucks to performance vehicles. We are in discussions with other OEMs for this technology as well.

**Can you elaborate on Visteon's USP for battery management systems and what sets it apart from the rest?**

Our wireless BMS technology eliminates wiring harnesses found in the battery packs of traditional systems, delivering a solution that offers a secure, safe and robust battery system for EVs. The wireless BMS also keeps a constant eye on battery health and operation, helping automakers enhance vehicle and passenger safety and improving overall quality and reliability.

We are developing three electronics components for this solution – the wireless cell monitoring units, the wireless network control unit, and the battery control and vehicle interface unit – to enable the assembly of battery packs without the need for low-voltage wiring harness. The software algorithms that act on the information provided by the cell monitoring units are typically developed by the OEM in collaboration with the battery cell supplier. We integrate these algorithms in our system as part of the design and manufacture of the BMS solution.

Visteon's wireless BMS stands out through its innovation. Our wireless technology reduces battery failure and maximises performance. It is also versatile because the modular design is customisable and scalable for any EV platform. The Visteon solution is flexible and robust, supporting multiple charging protocols. Its individual battery pack cells extend life and deliver efficient and effective power usage.

**What is the overall state of Visteon's business?**

Visteon continues to recover from the global downturn caused by Covid-19. Proactive company initiatives have driven strong performance, launching a record number of 44 new programs and winning a significant \$3.2 billion in new business by close of third quarter 2020. This was higher than we expected earlier in the

year, and is due to the company's strong performance despite worldwide shutdowns, unpredictable circumstances and fluctuating global production volumes.

We have built a solid foundation for continued growth in the future. Our product and technology portfolio for the digital cockpit is stronger than ever before, and together with the wireless BMS solution, is very well positioned to leverage the growing interest in electric vehicles.

**2020 was a memorable year for everyone for many different reasons. In your business, what stands out as the biggest challenges you faced over the past 12 months?**

**When the industry started returning to more normal levels in the second and third quarters, we won new business at almost pre-Covid-19 levels while simultaneously expanding our product and customer portfolio.**

The impact of Covid-19 was particularly significant for the global automotive industry, with production of vehicles expected to be down by about 10 percent over 2019. This is the most I have seen production drop in more than 15 years of working in the automotive industry. The speed and magnitude of the drop forced some difficult decisions on the industry that were needed to survive the downturn, and Visteon was no exception. In the face of global restrictions of varying severity, we launched a record number of new products with global customers. This would have been remarkable even in a normal year, and I am proud of the extraordinary effort of the team for not letting the pandemic affect our customer commitments. When the industry started returning to more normal levels in the second and third quarters, we won new business at almost pre-Covid-19 levels while simultaneously expanding our product and customer portfolio.

**What did you learn that you did not expect to learn?**

Even in a potentially devastating pandemic, there is a strong will to succeed and meet every barrier to make an impact for our customers, employees and communities. Time after time, the Visteon team excelled to overcome potential roadblocks during the pandemic and, despite the uniquely challenging environment, we have many reasons to be optimistic and proud. Our robust operating procedures have protected the health and safety of employees from the virus, and local health authorities recognised the Chihuahua, Mexico, manufacturing plant as being exemplary for taking these steps. Early in the pandemic when personal protective equipment was in short supply, we manufactured and donated tens of thousands of face shields to medical professionals in many parts of the world. I am proud of our global teams for pulling together to protect our workforce and the community.