

TAPPING INTO THE POWER OF ONE MAGNA: TWO TEAMS SHARE HOW IT'S DONE

Our product portfolio and collective expertise are unmatched in the industry. They align Magna with the car of the future and allow us to deliver solutions for any vehicle, automaker and market in the world.

Magna CEO Swamy Kotagiri says: "We're learning from each other, whether it's launches, program management, different processes and organizational structure. We see a lot of this cooperation going forward. Even more groups will come together to show the power of One Magna."

Magna People talked to three global teams about their technological breakthroughs and how to crack the code of collaboration. Here are their stories:

'A GOLDEN ENTRY TICKET INTO THE MARKET'

Technology: Magna Driver Monitoring System

Teams: Core team of six to nine Mirrors employees based in Kentwood, Michigan and Polinya, Spain and eight to ten Electronics employees based in Auburn Hills, Michigan and Sailauf, Germany

Opportunity: Leverage Magna's strength in ADAS cameras and interior mirrors to make an integrated product that reduces distracted driving and saves lives.

Solution: State-of-the art Driver Monitoring System that detects distracted behavior, drowsiness and fatigue.

KEY TEAM MEMBERS:

Kevin Lu, a Magna Electronics product line director and former chief engineer known as the "patent master." An expert in optics and cameras engineering for ADAS and autonomous driving, Lu holds 86 patents and is a photography buff in his spare time. His role: "Imagining that you are the consumer of our product - and then making it better, cheaper and more competitive."



Peter Spencley, a global product manager for Magna Mirrors and an expert in solving the challenges of automotive mirrors for more than 30 years. A motorcycle enthusiast who loves the freedom of the road, Spencley has owned everything from Yamaha bikes to a Harley-Davidson Fat Boy. His role: "Looking at problems, then working with the team to find solutions that customers want."

Spencley

We started working on the project about two years ago. We called a meeting with the Electronics team and asked "What do you guys know about driver monitoring?" We really ramped up our collaboration quickly. It's been enjoyable. Customers have thrown one challenge after another and we've come back and exceeded expectations. No one group could have solved the challenges on its own.



Lu

Magna has a unique position because we are top players globally in cameras and interior mirrors. We knew if we teamed up and made a product totally integrated into the mirror it would give us a golden entry ticket into the market. The main benefit is significant cost savings for the OEM customer. The added engineering complexity is solvable. Magna leadership realizes tapping into the power of One Magna is a huge advantage.



Spencley

We know we have "lakefront property" with a vehicle's interior mirror. In other words, the location of the rearview mirror is prime real estate for technology features. It's the perfect location for the Driver Monitoring System. There is an unobstructed view between the driver and the mirrors.



Lu

We've got the technology, but team building in a pandemic can be a challenge. You meet online and work out a plan and work hard to execute the plan. We have fun together. It can be a virtual happy hour at 5 o'clock where you tell silly jokes or ask everybody to recount an embarrassing moment.



Spencley

As team leaders, Kevin and I talk on a regular basis, sometimes four to five times a day. There is an open line of communication within the teams. We don't always agree with each other, nor should we. But both groups could always see the opportunity.



Lu

You must have a clearly defined common goal and align the interests from different groups and divisions. Then things are easier. Respect each other. It's not like your own group that you've known for a long time. You have to listen to each other, contribute and work hard. Good ideas will result and a quality competitive product will be the outcome.



Spencley

Have patience. The decentralized nature of Magna requires patience in getting it going. We all have our own goals, objectives and priorities. That's where patience and perseverance come into play. A close collaboration has its rewards. With the Driver Monitoring System, we leveraged Magna expertise to deliver a final product that is better than the competition.



'READY FOR THE VEHICLE OF THE FUTURE'

Technology: Illuminated Thermoplastic Liftgate

Teams: Core team of 15 Exteriors employees based in Troy, Michigan; Banbury, England; Liberec, Czech Republic; Shanghai, China; Tokyo, Japan and Esslingen, Germany, and five Lighting employees based in Plymouth, Michigan, and Rivoli, Italy.

Opportunity: Leverage Magna's strength in Exteriors and Lighting to integrate hidden, functional lighting that meets regulatory requirements into a thermoplastic liftgate.

Solution: Use new materials that allow light to shine through



plastic, enabling Magna to support the vehicle of the future.

KEY TEAM MEMBERS:

Rob Selle, the Magna Exteriors global product line technical director for liftgates is an automotive enthusiast working to develop components that go far beyond conventional bumpers, hoods and liftgates. A longtime competitive cyclist, Selle also coaches young athletes, manages teams and participates in riding clubs in his spare time. "There's a lot of exposure to a high-intensity environment when you are coaching young athletes. I like to be a support person and give someone the opportunity to excel. I try to apply that in my job as well."



Dominic Smith, Magna Lighting, director of global product management, is responsible for identifying automotive trends, customer targets and pricing strategies as part of project objectives. He describes himself as a "questioner" who guides the team to see big-picture opportunities. In his spare time, Smith is a goalkeeper with the Michigan United Soccer League. "As a goalkeeper, you have a view over the entire field, observing the team dynamic and the seeing plays develop. It gives you unique insight into how the game is being played. This approach has helped me in projects to be patient and observe how things happen. To think a little more, analyze a little more and figure out how to adjust."

Selle

The collaboration with Magna Lighting started with a different product more than three years ago. Dominic came to me with an innovation in fog lamps. We built on that initial dialogue and now we look at other opportunities for design collaboration. It illustrates the Power of One Magna. I'm a firm believer there's always somebody somewhere who can help me solve a problem. I love being able to leverage the organization and cultivate creativity.



Smith

There was a growing interest in the market to use lighting as a brand differentiator and a design characteristic. Lighting was starting to appear in non-traditional places, such as door handles and wheel wells – not purely for vehicle safety. We both said: 'We need a partner. We need to start talking to each other. I used to work in Exteriors. I knew the scope of their products and could see how lighting could add value. I played in both sandboxes, so collaborating made sense.



Selle

Our strength lies in the breadth of our product. We have a very diverse portfolio. My team may have tunnel vision, then we talk to other groups and they say: 'Did you think of this?' We're no longer narrow-minded. Then the whole world opens up.



Smith

The goal was to bring lighting solutions to the Exteriors team that could be integrated into the liftgate to add unique customer value and enable innovative styling – and to mutually grow our business.



Selle

OEMs are asking for this kind of solution. You can't shine light through metal, but you can shine it through a thermoplastic liftgate. You touch the brake pedal and the light shines through the plastic, unlike a traditional taillight. The technology uses a new type of plastic that's being developed right now. It opens up big possibilities. It tells OEMs we're ready for the vehicle of the future.



Smith

The greatest challenge in our sessions is staying focused on a singular concept. One brainstorming session with Exteriors resulted in 50 ideas! Then the liftgate project became the focal point. We also integrated people into the team from Magna Electronics and software employees from other groups to provide technical insights that were beyond our scope.



Selle

The biggest challenge is communication. I like to do meeting notes on the screen during Microsoft Teams and share them through OneNote. By putting it in writing everyone is clear on the process and what you need to get the job done.



Smith

Don't assume the solution has to look like something you've done in the past. If your mental model is 'This is how we do lights or optics and my solution has to look like that,' think again. Break down the barriers. There is a solution on the other side of the barrier I might never have seen or used before.



Selle

You welcome all ideas, but they must align with our business plan and manufacturing capability. This approach helps us develop the technology roadmap for future vehicles.



