Interview with Prof. Dr. Stefan Bratzel

Prof. Dr. Bratzel leads the Center of Automotive Management (CAM), an independent institute for empirical automotive research and strategic consultation based in Germany. CAM has been tracking innovation within the global automotive industry for more than 9 years. Its databases now include more than 5,000 individually evaluated innovations from car manufacturers and automotive suppliers around the world. CAM presents the AutomotiveINNOVATIONS Award annually, now in cooperation with PwC.

PwC: Our survey found that around a third of automotive executives don’t yet have a well-defined innovation strategy. Why is a clear vision important?

Prof. Dr. Bratzel: We’re seeing major technological upheaval happening in the automotive industry. As just two examples, the advent of connected cars and the development of new types of power trains will both have a dramatic impact. That creates challenges for OEMs and suppliers, especially since it is not yet clear which technologies will become dominant. So it’s very important to have a well-defined vision of where you want your company to be in five or ten years and how it will get there.

PwC: The automotive executives we interviewed have ambitious plans for radical and breakthrough innovation around technology over the next three years. What areas do you see as most important?

Prof. Dr. Bratzel: Vehicle connectivity stands out as an area that will have a very big impact. That affects a whole range of technologies, like driver assistance, car-to-car communication, autonomous driving and more. These advances will change how customers think about mobility and how they use their vehicles in radical ways.

PwC: Our survey respondents are also focusing on innovation around the customer experience. How do you see automotive companies responding to customers?

Prof. Dr. Bratzel: We actually see customer experience as intimately linked to all product innovation. Every advance that we at CAM rate as an innovation has to demonstrate a customer benefit compared to the status quo. The bigger the benefit to the customer, the more relevant and important the innovation is. So the customer experience is very important in nearly every area.

Take power train as an example. Some of the innovations in this area are having a dramatic impact on fuel efficiency which is very important to car buyers. And when you get into the area of alternative powertrains, whether full electric or hybrid variations, you can see even more clearly the importance of connecting customer experience to product innovation. OEMs still need to come up to grips with many elements of the customer experience as it relates to electromobility. They need to understand the range consumers need or expect what kind of charging options are important to them and many other questions about consumer behavior. These factors will all have a big impact on the approach automotive OEMS decide to take in developing electric vehicles.

In general, OEMs are often very good at automotive engineering, but they sometimes fall short in really connecting product innovations to customer experience.

PwC: Your research focuses primarily on product innovation. About a third of our respondents say they expect radical or breakthrough innovations in products over the next three years. Do you think that’s realistic? How often do you think product innovations impact on other areas like the supply chain, business models, or systems and processes?

Prof. Dr. Bratzel: That’s an ambitious goal. We’re seeing a very small percentage of really radical innovations making it to the market – probably in the single digits. It’s important to remember that the more radical an innovation is, the higher the chances are of failure. But the industry needs to take some chances to keep moving forward.
Breakthrough innovations tend to be somewhat less risky and also more common. We’ve found that really strong product improvements are often linked to other types of innovation, especially around services and the business model. For example, a product innovation around driver assistance could lead to a change in the business model where an OEM partners with an insurance company to reduce insurance costs based on the reduced chance of an accident.

Product innovation is also almost always linked with process and supply chain innovation. OEMs (and suppliers) need to make sure that product innovation is affordable and that often means improving processes. It is part of what is often called the democratisation of innovation which I think is really changing the face of the automotive industry.

PwC: This year the first time that CAM has awarded prizes to the most innovative suppliers as well as to OEMs. Are OEMs and suppliers working together on innovation?

Prof. Dr. Bratzel: When OEMs are looking to make really radical changes to technology they tend to look more to suppliers for their input. I see trust as one of the most important success factors. OEMs and suppliers working together on a breakthrough or radical innovation need to be able to rely on their partner.

PwC: Are you seeing any other trends in how OEMs are collaborating on innovation?

Prof. Dr. Bratzel: The more that OEMs strive for breakthrough or even radical innovation, the more we see new players from other industries coming in and beginning to make an impact. One example would be partnerships with technology and communications companies around the connected car. These companies bring a different, new perspective on the customer experience. Strategic partners from other industries may also use different innovation operating models. Ultimately these types of collaborations will probably increase the pace of innovation in the industry.

PwC: Automotive respondents are very concerned about talent and developing a strong innovation culture. What factors do you think are most important to attract key innovators and create an environment that fosters innovation?

Prof. Dr. Bratzel: For me a culture which is able to tolerate some failure is absolutely vital. As I’ve said, radical innovation is inherently risky, so companies need to be open to new ideas that don't necessarily pan out.

I also think it’s important to keep an open mind when it comes to hiring candidates with more diverse backgrounds. The industry tends to stick to mechanical engineers, with maybe some computer scientists and a few business administration grads thrown into the mix. Bringing staff on board from other areas like the humanities can help bring in new perspectives that shake up the traditional thinking. Having more diverse people in the company also helps when it comes to understanding what customers are looking for.