FUTURE-PROOFING INNOVATION x AUTOMOTIVE

How can the Automotive industry create a virtuous cycle toward sustainability?

INTRODUCTION

Future-Proofing Innovation is a series of roundtable conversations hosted by Capgemini sustainability and business experts inviting clients, partners, academics, and influencers to discuss the general topic of sustainability in innovation. Each discussion focuses on a specific industry. The second roundtable took place at Capgemini's Applied Innovation Exchange (AIE) in Munich on 22nd September, with a focus on the automotive sector.

THE DIGITAL GENERATION: SUSTAINABILITY GOALS

Addressing changing consumer perspectives is vital. Ralf Blessman discussed the need for automotive enterprises to bring together as many elements of their organization as possible – technology, processes, and more – to support their drivers and help them evolveget into a more efficient, sustainable mode. When people feel supported, and feel that they themselves are now making a great environmental contribution, a virtuous circle can be created. Improvements can be made incrementally, even where drivers aren't yet behind the wheel of electric vehicles.

What's more, rewards systems can be used: drivers can accumulate company credits against future purchases, which not only reinforces sustainable behavior but generates brand loyalty.

Sustainability isn't just a customer-facing commitment either, Mathias Kaldenhoff said, nor even the result of a broader commitment to societal responsibility. It's also a key factor in the ability to attract and retain employees. Justin Gemeri agreed. He said that in founding ekipa, the goal had been to tackle sustainability issues – and to do that, it's vital to engage younger people. "This generation brings so much potential," he said. "They bring so many new ideas, so many new perspectives to the table that can help to overcome those upcoming challenges." Juergen Sturm agreed: "If you want to have passionate people, you should have exciting targets where they can see the value and the purpose. This really creates a lot of energy."

Justin Gemeri pursued the point. He said that people live in different circumstances in different parts of the world, and that this has a bearing on their sustainable development priorities. However, he continued, "what unites young people in the digital generation is that they take sustainability seriously, and they don't accept greenwashing. They expect action – and when they graduate and look for work, that's where their focus is."

> *We are helping our customers to understand and react to the future where the only shareholder of all our industry is planet earth.*
>
> **Mathias Kaldenhoff**
> Partner Sustainability & Innovation Management, Office of the Chief Technology Officer (CTO) – SAP Germany

AUTOMOTIVE INDUSTRY: SUSTAINABILITY CHALLENGES

Daniel Garschagen invited other event participants to provide an assessment of the current sustainability picture in the automotive industry.

Markus Winkler said that moves towards sustainability in the sector have accelerated since the emergence of the electric vehicle market. The impetus has grown to a level at which it's now a key factor from one end of an enterprise to the other – from production and operations, out to the supply chain, and beyond.

Automotive businesses, Markus Winkler continued, need to ask themselves where enterprise-wide sustainability begins and ends. It isn't always straightforward. For instance, he said, you can put a part which has a lower sustainability footprint into a vehicle, but you later find it will consume a lot of energy to recycle this part. You might also find that the recycling quota for the part is lower. It's in areas like this that organizations need to arbitrate – and that's where technology has such an important role to play, because how else can businesses keep track of all the variables?

ZF Group is a global technology company supplying systems to the automotive industry, and Juergen Sturm developed Markus Winkler's argument. He said it was the goal of automotive systems developers such as ZF to use technology to drive electrification, decarbonization, efficiency, safety, and more – and that to make all this happen, the interconnectedness of things was vital.

Like many businesses, Juergen Sturm said, ZF had set itself ambitious sustainability targets – and targets like these need to be a collective endeavor. "No company can achieve this alone," he said. "We have to involve the large companies, the manufacturing companies, software companies, academia, startups, systems integrators – everyone. I think that's exciting because science and technology is the answer. And we must really leverage it."

As a leader in its market, SAP can provide a broad perspective on the state of sustainability in the automotive industry. The challenges that Mathias Kaldenhoff observed included the need for diligence in a digital supply chain, especially given its present-day complexity. It's difficult to monitor and manage sustainability issues in globally intricate supply chains, and to do so at the pace that modern business now requires.

ECONOMIC AND ECOLOGICAL GOALS ARE NOT IN CONFLICT

The challenges may be great, but so are the opportunities. Mathias Kaldenhoff gave an example.

He said automotive engineering businesses have always had to balance costs against performance, and that nowadays the third factor in the mix is sustainability. SAP, he said, is working with a customer to create an environment in which processes, materials, components, tools, and more are balanced out against one another to achieve optimum carbon metrics on a case-by-case basis. For example, the partnership was exploring approaches to product design that made maintenance and repair easier and more sustainable.

Juergen Sturm applauded this principle. He said that sustainable goals didn't just help automotive businesses to meet regulatory requirements and their own social responsibilities – they also delivered premium products that customers would be able to judge. For instance, a value chain that is digitally integrated and auditable from end to end would enable manufacturers to demonstrate how much of a new car in a showroom has been recycled, and what its carbon footprint is. "I firmly believe," he said, "there is no conflict between sustainability and economy. On the contrary, one is fueling the other." "Yes," said Justin Gemiri. "The sustainability of a company will be a key to its economic success. Younger customers who will become the core target group in the next few years will not buy products from companies that do not act sustainably."

Sustainability doesn't just make business sense from a customer perspective. Juergen Sturm told the rest of the group about a project some years ago in which he renovated a data center. He doubled its performance – but at the same time, the state-of-the-art efficiency measures he introduced resulted in a €250k cost saving.

Our event facilitator, Daniel Garschagen, observed that to achieve sustainability goals, collaboration was necessary – not just along the value chain, but across society at large. Justin Gemeri agreed. He spoke of the insights and enthusiasm that start-ups can bring to problem-solving, but added that everyone had a role to play. "In the end," he said, "it's about co-creation. Start-ups bring huge potential, bring great new ideas, new perspectives, new technologies – but you also need the experience of established organizations, you need the leverage that big companies bring regarding access to customers, and also regarding R&D budgets, for example. Together, organizations large and small need to create an ecosystem, a framework, where they can co-create on one level – and that's where innovation is happening right now."

THE ROLE OF IT IN SUSTAINABILITY

Our event participants agreed that while IT infrastructure is itself responsible for carbon emissions, the net proportion is small, and is countered by the significant opportunities it brings to achieve sustainability. Examples include better supply chains, more efficient production, and the reduction of the need to travel. Importantly, and as we have already seen, technology also enables organizations to measure their sustainability status – and if you don't measure, you can't demonstrate improvement.

Juergen Sturm spoke enthusiastically about a CIO community in which he and senior executives from Capgemini and other organizations are active. "We are bringing together small companies and large companies," he said. "We want to exchange best practices and focus on implementation, because only implementation counts." Ralf Blessman observed that agile approaches to development marked a cultural change in collaboration that was initiated by CIOs, and that the new challenge for CIOs was now "to step up and create a massive impact on corporate sustainability."

Mathias Kaldenhoff pointed out that only 5-7% of data produced today is useful. The rest of it, generated by sensors, other IoT devices and so on, is a distraction, and we need technology to help us focus on what will be helpful in the pursuit of sustainable goals.

> *Achieving sustainability goals is a team sport.*
>
> **Daniel Garschagen**
> AIE, Sustainability, and Innovation lead, Capgemini Deutschland

PUTTING WORDS INTO ACTION

Daniel Garschagen asked everyone to wrap things up by summarizing their own organization's sustainability efforts.

For ZF Group, Juergen Sturm said his company is striving for next-generation mobility that is clean, safe, comfortable, and affordable – and that it is using all its technology to make this happen as soon as possible. "I think we need everyone in our company and everyone in our partnerships to focus on this topic together," he said.

SAP's Mathias said, "We are doing everything to help our customers not to consume more than they produce. We're also aiming to understand and to react to the future we anticipate, where the only shareholder of every industry and enterprise will be Planet Earth."

For ekipa, Justin Gemeri said that technology and innovation are the key drivers for creating a more sustainable world, and that smaller companies like his own need to work alongside larger, well-established corporations and political institutions to overcome challenges and devise solutions.

For Capgemini, Markus Winkler said that in addition to meeting its own sustainability targets, the organization was committed to saving 10 million tons of carbon for its clients by 2030. Ralf Blessman added that it was a commitment that was shared across Capgemini's three main business areas of consulting, IT and services, and engineering – and he pointed out how relevant the company's tagline is to the topic under discussion:

"Get the future you want."

FUTURE-PROOFING INNOVATION

The automotive panel

Jürgen Sturm
Chief Information Officer at ZF Group

Justin Gemeri
CEO at ekipa

Mathias Kaldenhoff
Partner Sustainability & Innovation Management,
Office of the Chief Technology Officer (CTO) – SAP Germany

Dr. James Robey
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Markus Winkler
EVP, Global Automotive Team, Capgemini

Ralf Blessmann
EVP, Automotive Market Unit Lead and Sustainability Sponsor,
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