





Dr. Michael Dinkel



What distinguishes Luxoft Automotive from the rest of the market and which innovations have you brought?



Luxoft, a DXC Technology Company, provides bespoke, end-to-end technology solutions for mission critical systems, products and services. It is a software services organization that has gained significant relevance for the automotive industry through work with the key automakers in Germany and around the world. We have developed very strong expertise in key areas where software competence helps our clients to differentiate through their products. For example, we help our clients' software transformation with software factory solutions – even to the point where we build up complete software teams including handover to the client organization.

We're influential in the domains of In-vehicle Infotainment, Connectivity, and Autonomous Driving and ADAS, but also areas that span different domains to enable the holistic view of a "car operating system" such as in-vehicle platforms and Testing and Validation.

Regarding innovations, Luxoft is the partner for Mercedes, developing the software of the MBUX system up to the amazing Hyperscreen which features in top-of-the-line Mercedes vehicles. Furthermore, we have been a key partner, for example in BMW's new 7 series ADAS systems.





What surprising obstacles have you encountered during your 7-year journey with the company?

I never expected that the biggest challenge in my position would not be about software but about business continuity in the face of the Russian invasion of Ukraine. When the invasion started in early 2022, Luxoft had a very strong development team of thousands of software engineers in both Ukraine and Russia. The term response-task-force best describes how we reacted with daily communication to thousands of employees and all of our clients. We immediately organised safe places for people to move to and arranged hundreds of bus transfers for colleagues in Ukraine. Over the next weeks and months, it became clear that Russia could not continue to be one of our delivery locations, so Luxoft decided to act on a predefined risk-mitigation plan and in less than 1 year we established eight new locations in eight new countries. We relocated more than 1200 families from Russia to Serbia by organising charter flights, two a week for some time. Over a few months, we became the largest software company in Serbia.

Overall, I am amazed at the way everybody supported our colleagues in need and how Luxoft managed the business so that no project was dropped, and no delivery was negatively impacted. This was recognised explicitly by our clients and helped to build further trust.



The automotive industry is increasingly talking about software-defined vehicles (SDVs). What do you understand by this term and what are the industry's biggest challenges connected to SDVs?

Michael

The term "software-defined vehicle" encompasses more than vehicles where most major functions are implemented or impacted by software. As software can be updated, the end-user view of an SDV is often restricted to a vehicle with functionality that can be changed and added to during the lifetime of a car. However, the transition to SDVs goes beyond the car itself in many ways as we also have to consider the bigger picture – what we call "the big loop". Vehicle fleets produce data in the field. This is centrally collected and fed to Al-based training of models, and thousands of well-orchestrated developers in a harmonised infrastructure working on improving the software stack. The development teams continuously (CI/CD) produce new features, upgrades, bug- and security fixes. And all that needs to be tested, homologated, and rolled out to the fleet over the air.



In the end, new business models become possible through all the components that compose the SDV in its environment of continuous evolution. The real challenge is to develop or evolve an organisation that can keep the software-focused machine running day after day. While established OEMs have challenges here, technology organisations are also challenged at this crossroads of software technology and automotive products development.

4.

What do you see as the main software challenges in automotive in the next 2 years?

Michael

The main development challenge is the complexity of SDV systems: The overwhelming interdependencies of the functional network that covers a vehicle's functionality end-toend including the backend and cloud infrastructure. While we see an exponential growth in complexity, the productivity increase in engineering is growing only linearly. Additionally, the speed coming from China is driving the need to reduce development cycle times – to significantly shorten the time of "code to car". To cover this gap, we lift some of the burden of complexity from the shoulders of automakers by applying structured, proven processes, supported by Al-based approaches fit for automotive requirements: Cyber Security, functional safety, ASPICE. As a Software Systems Integrator, part of our mission is to take more responsibility for a larger scope end-to-end – with deep domain knowledge as our backbone, and a solid partnering concept as the accelerator into specific areas. At the same time, software companies are not alone in this: traditional Tier1 suppliers are more and more accepting their evolving business model – more software is purchased stand-alone, without hardware. The overall industry is massively changing, accelerated even

How do you ensure that you have the right people in place to deliver the best possible results under these circumstances?

Michael

I would have to start with the fact that we are very selective with our hiring of talent. We use a multi-stage approach to ensure our people have a solid technological basis combined with the right attitude of "getting things done". For me, the leadership approach is highly relevant. I need leaders on all levels, people who understand the goal and direction based on our vision statement and take responsibility to drive business proactively. What's important, however, is we take care to emphasise that success is a team result, and that cooperative leadership is our way. In addition to the right hires, we have organised Luxoft engineering around a matrix of accounts and domain-focused chapters which leverage our own Luxoft Academy to ensure continuous learning and education, leading to the personal growth of every individual. We are aware that today's juniors will become tomorrow's leaders.





In the fast-paced world of engineering, staying ahead with the latest tech is crucial. How do you, as an executive, keep your finger on the pulse of innovation?

Michael

I very much enjoy learning from the smart people around me such as our solution architects and chapter leaders. In addition, I join training as well as executive education programs. Beyond that, I read books on topics that go beyond everyday challenges, and I also listen to various podcasts on tech or management topics. A recent course on the neuroscience of decision-making was very insightful: Understanding why we react and how to use that to be better with all sorts of difficult topics.

7.

If you were asked to recommend a book on building highly motivated teams to our readers, which would you choose and why?

Michael

There is one book that I recently discovered: "Primed to Perform" by Neal Doshi and Lindsay McGregor. What I like about this book is how it combines insight based on scientific research with real-world examples. It is about the why and how of motivation of employees. How to build high-performance organizations and which tweaks in culture work in which way. I wish more leaders of all sorts of organizations would read this book and apply some of the suggestions in real life.



Biography

Dr. Michael Dinkel is the SVP of Automotive Engineering at Luxoft. He is ultimately responsible for delivering all of Luxoft's automotive projects on time, quality, and budget, as well as ensuring that this will strategically be achieved going forward.

"Midi"—as he is known to colleagues—is a results-oriented global software engineering leader with more than 20 years of experience in embedded software and the automotive business.

Fascinated by the automotive industry, Midi holds a Diploma in Computer Science from Erlangen University (2003), worked as a developer, project leader and architect before completing is Ph.D. at BMW Research and TU Munich in 2007.

Covering various leadership positions, Midi has developed a strong focus on people-centric organizations that amplify the motivation of individuals towards a common goal.

