



## Building Supplier Ecosystems in the Truck Industry

Within the transformation path of the truck industry, one highly critical field of action is the creation of partner ecosystems

The truck business is at the center of radical change. There are pressing current industry topics like consolidation and separation, there are Corona-related supply issues and Ukraine-related Eastern Europe issues. And there are four long-term, overarching strategic trends that demand a large-scale

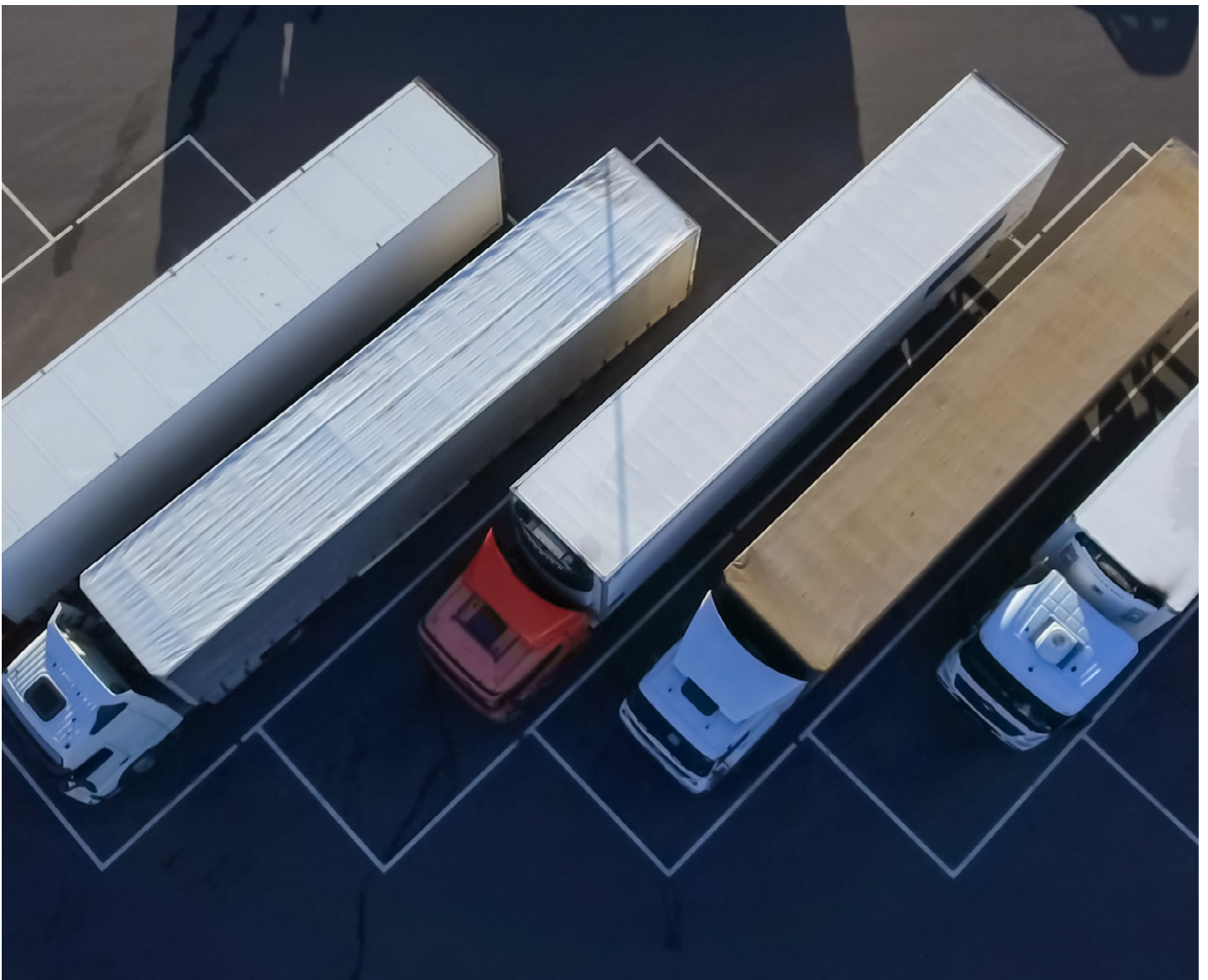
transformation from the entire industry: new drivetrains, digitalization, connectivity and autonomous will shape the future of road transport. ➤

**Value moves to production and customers**

Examining these four long-term strategic trends reveals two basic value shifts in the industry that companies must follow in order to occupy the future sweet spots:

- Upstream to a new agile and digitized production system, including development, procurement and manufacturing – important buzzwords here are “IoT” or “Industry 4.0”
- Downstream to create added value to the customers by way of services rather than (just) by way of sales – the buzzword here is “smart mobility”

To the truck industry that is nothing new: The concepts of IoT and Industry 4.0 are more than a decade old, and the Mercedes Benz’ subsidiary for downstream services, CharterWay, was founded as early as 1992. That shows that these large trends have been known for quite some time now, and the first players have started in so long to transform in that direction. Deloitte research shows that, by now, most companies of both the automotive and the truck industry are since some three to six years on their transformation journey.

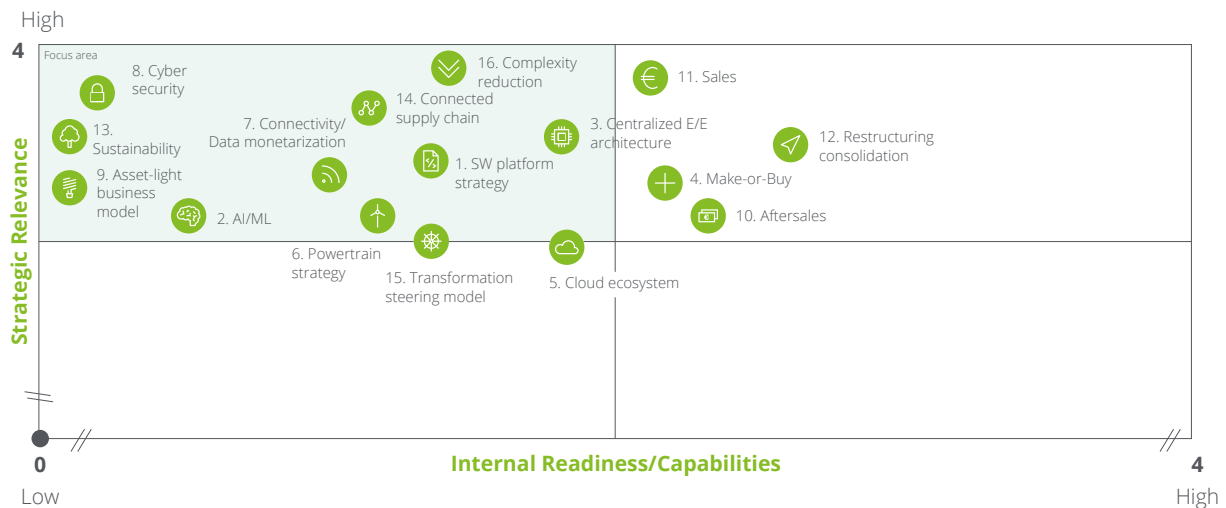


**Networking is an integral part of digitalization**

In this article we want to focus specifically on the upstream transformation of the truck industry, and here on supply ecosystems. A Deloitte survey identified 16 transformational action areas (see Fig. 1). What most of these action programs have in common is: They are strongly driven by IT systems and software.

But there is one more thing except IT that is indispensable to almost every digital initiative, in the truck industry and elsewhere: It is the need to collaborate more intensively – with partners in all areas, like development, production, procurement, sales and service. Because in order to really reap the benefits of digitalization it does not suffice to just optimize your own internal processes and supply chains. You have to do it across the whole production network, supply chain, and sales channels.

**Fig. 1 – Overview Burning Platforms**



**1. Software (SW) platform strategy**

Integrated platform with suppliers enables real-time data accessibility and delivery management

**2. Artificial Intelligence/Machine Learning (AI/ML)**

AI/ML enable new ways of working and optimized processes but, a more stringent implementation is needed

**3. Centralized Electrical/Electronic (E/E) architecture**

Trend and its implications might be understood, however effectivity of actions is taking too long

**4. Make-or-Buy**

Shift of core business, new products etc. impacting TOM and global footprint (ramp-up/-down)

**5. Cloud ecosystem**

Cloud services are an essential enabler for software-driven functionalities, good basis but further development needed

**6. Powertrain strategy**

Hybrid concepts; Battery Electric Vehicle (BEV) and infrastructure; Electric Vehicle (EV) cannibalization; new entrants – modularization

**7. Connectivity/Data monetization**

End-to-end data connectivity enables usage of new revenue streams and business models

**8. Cyber security**

Protection of company assets/information based on highly specialized expertise

**9. Asset-light business model**

Rethinking manufacturing strategy to increase return on invest in context of ecosystem play

**10. Aftersales**

Single product to solutions along PLC, Dealer Performance, Service Contracts, Customer Data Analytics

**11. Sales**

New sales concept for e.g., eCommerce, mobility services, B2B „Buy Transportation“

**12. Restructuring consolidation**

Shifting to new business models due to shifting profit pools leading to an increase in consolidation/divestiture

**13. Sustainability**

Anticipative management towards a zero-carbon supply chain securing delivery capability

**14. Connected supply chain**

Integrated platform with suppliers enabling real-time data accessibility and delivery management

**15. Transformation steering model**

Transformation steering model (Pay Day) and scorecard

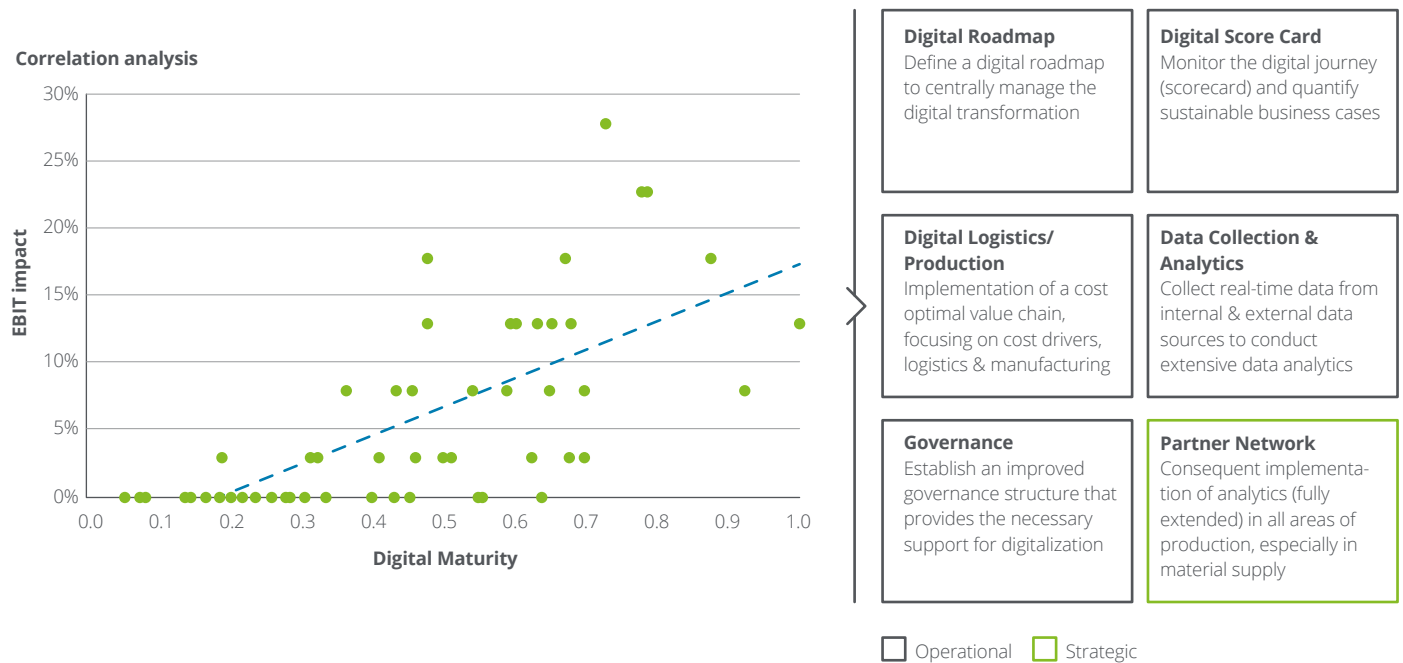
**16. Complexity reduction**

Reduction of variants in an early stage of product development – VOC

Source: Deloitte expert interviews

We also see this trend to more collaboration by analyzing the global Deloitte database – the more digital and advanced automotive suppliers become, the more collaborative and connected they get (see Fig. 2). In fact, it almost seems as if advanced digitalization and collaboration with network partners are interdependent and mutually amplify each other.

**Fig. 2 – Deloitte Digital Maturity Index Automotive/EBIT impact**

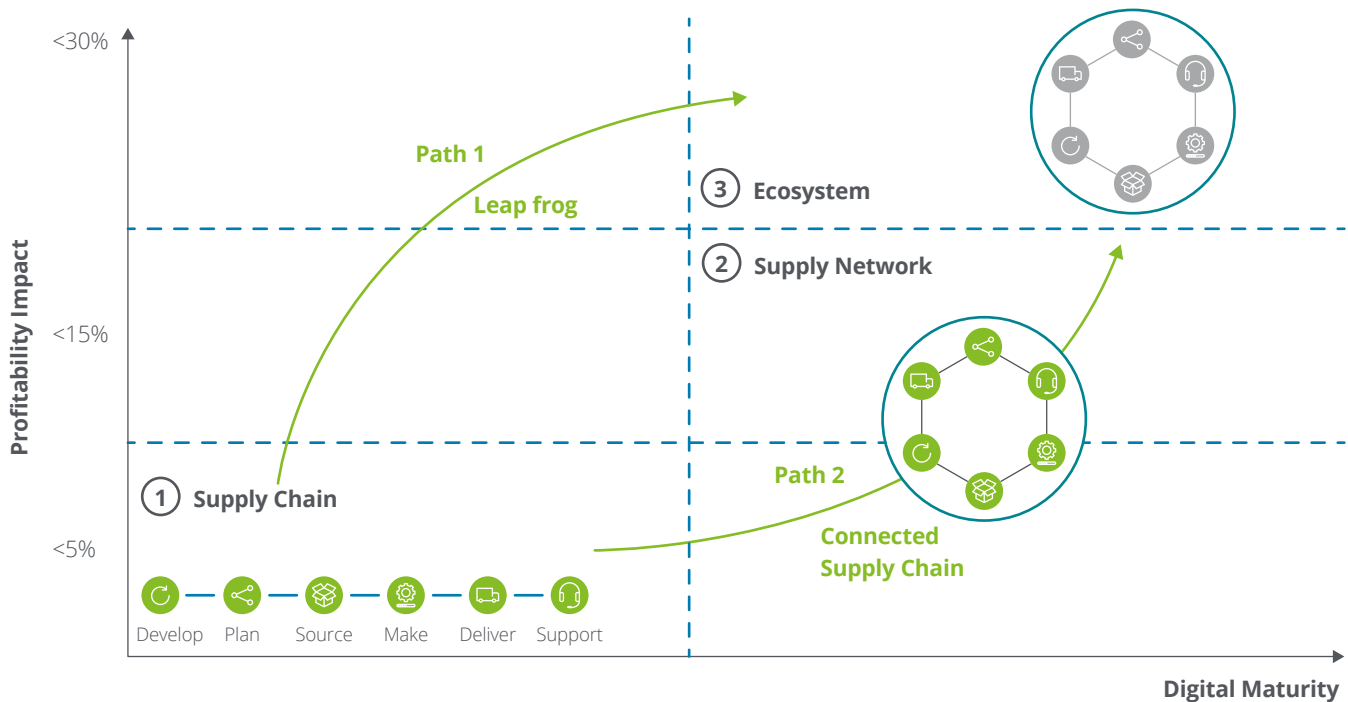


In procurement digitalization always prompts a move away from traditional supply chains towards to more integrated supply networks with a fix set of partners. In a further digitalization step this evolves into a supply ecosystem (see Fig. 3). Traditional supply chains have discrete processes for development, planning, sourcing and delivering. The end buyer defines and initiates the different processes, and also owns the collaboration (IT) system. Within an integrated supply network, also called a connected supply chain, more responsibilities are shifted to a set of fixed network partners, and a lot more information flows freely between them. But still the end buyer owns the processes and the platform on which the exchange happens.

In a supply ecosystem, which is the most evolved digital supply chain, even the platform and the processes get shared between the partners. So far, only very few companies have reached this advanced ecosystem level – not only within the truck industry, but in all industries. However, many companies have stated that they want to achieve this as the potential gains are significant (again, see Fig. 3).

So far, only very few companies have reached this advanced ecosystem level

Fig. 3 – From a Traditional Supply Chain to a Supply Ecosystem

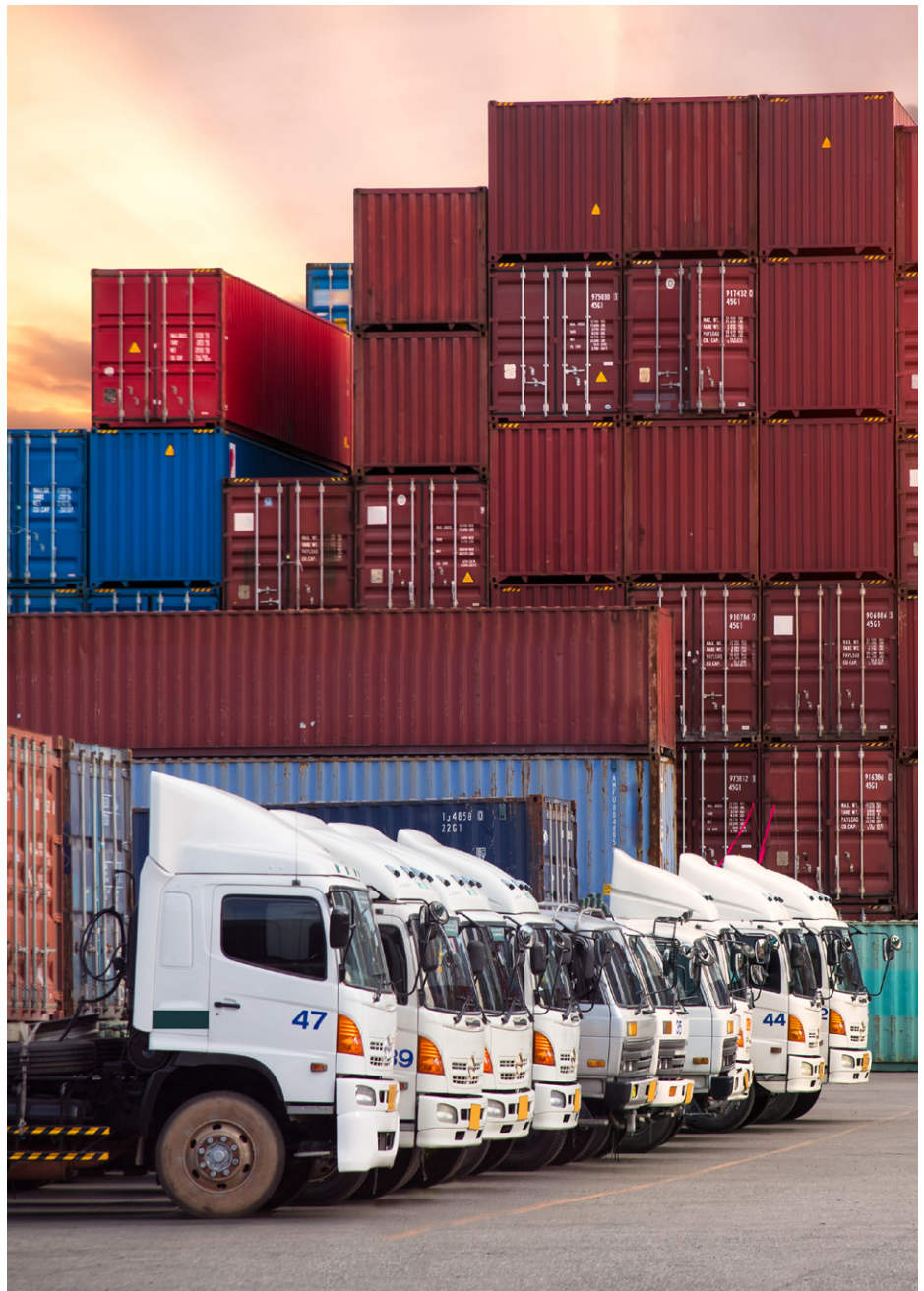


**The ecosystem challenge**

So, if everyone aims to establish a supply ecosystem, why have so few succeeded? A Deloitte survey from February 2022 among German manufacturing firms hints at the answer – there are very many goals for such ecosystems, and they are all practically equally important:

- Fix set of ecosystem partners
- Modular build of the ecosystem
- Complementary build of the ecosystem
- Know-how transfer
- Common Governance
- Common business activities

As you can see, all relevant factors are almost equally important. But you cannot do everything at the same time. This creates a huge chunk of work at start, and just takes time. Very few companies will want to leap from their traditional supply chain directly to a full supply ecosystem. Most will go the safer way via building a connected supply chain. Here, not all processes have to be changed simultaneously, the risks are smaller, and the transition is smoother.





**There are three core elements to be established for a functioning ecosystem**

**Create a technological basis for “connected value creation”**

As mentioned before, a true ecosystem is run by all partners together. There is no system owner, and data ownership and sharing are jointly regulated. The German automotive industry is currently developing a common ecosystem platform for the industry by the name of Catena X, but so far there is no comparable activity in the truck industry. The biggest technical challenge for all partners is to sufficiently integrate their disparate systems landscapes, including all legacy systems and foreign systems that keep coming in by way of acquisition. An ecosystem software must offer a monitoring and steering “dashboard”, a real-time management of all partners, a supply chain optimization solution, and a compliance monitor to manage ESG. Implementation is usually quite easy for one plant, but it is hard to do it company-wide.

**Quantify the business impacts and “fair share of profits”**

Betting on ecosystems means that companies can hope to reduce their assets, to share investments and risks and to regu-

larly save time-consuming process steps. However, hope is not enough. Each partner in an ecosystem must know how to measure these effects in order to control and steer them. While joining a network is easy, new partners will soon be forced to invest, and need to gauge the success of their engagement. This is no traditional investment calculation, so a way must be found to integrate the networking economics into the existing planning and controlling processes. This, however, is no trivial task. Many companies have struggled at this point. In principle, ecosystems enable cost avoidance and cost reduction effects, additional revenue opportunities, margin improvement benefits as well as agility improvements.

**Build trust among the partners**

In ecosystems a lot of data must be shared, and while there will be a common governance not everything can be regulated in advance. Also, all rules can be circumvented. In an industry like truck, with high competition and protected competencies, this is potentially a big hurdle. This is why a functioning ecosystem needs strong mutual trust among all partners. There must be a governance system that is flexible enough to allow for constant improvements and changes – but that also sees to

it that profits are shared according to the individual contributions. Usually there will also be third partners to provide independent counsel and assurance, and act as a referee between the ecosystem partners.

As you can see, building a supply chain ecosystem is no easy feat and takes time. But there are no alternatives with regard to the overarching long-term industry trends discussed above. The truck industry is on its way to become a very different industry within the next ten to twenty years, and supply ecosystems – as essential platforms of collaboration – will play a major role in shaping the change.

# Author



**Dr. Harald Proff**

Partner  
Global Sector Lead Automotive  
Tel: +49 211 8772 3184  
hproff@deloitte.de



**Claudia Ahrens**

Director  
Supply Chain & Network Operations  
Tel: +49 40 32080 4829  
cahrens@deloitte.de



**Sascha Mauries**

Director  
Strategy & Operations  
Tel: +49 211 8772 4637  
smauries@deloitte.de



**Thomas Jung**

Senior Advisor  
Automotive & Truck Expert  
Tel: +49 211 8722 3184  
thojung@deloitte.de



## Contact us



**Andy Zhou**

Deloitte China Automotive Industry Leader  
Deloitte Consulting China Automotive Leader  
lingkunzhou@deloitte.com.cn



**Golden Liu**

Deloitte China Automotive  
Risk Advisory Leader  
goliu@deloitte.com.cn



**Wilson Liu**

Deloitte China Automotive  
Audit & Assurance Leader  
wliu@deloitte.com.cn



**Laurain Zhao**

Deloitte China Automotive  
Financial Advisory Leader  
lazhao@deloitte.com.cn



**Yi Zhou**

Deloitte China Automotive  
Tax and Business Advisory Leader  
jchow@deloitte.com.cn



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities, which cannot obligate or bind each other in respect of third parties. DTTL and each DTTL member firm and related entity is liable only for its own acts and omissions, and not those of each other. DTTL does not provide services to clients. Please see [www.deloitte.com/de/UeberUns](http://www.deloitte.com/de/UeberUns) to learn more.

Deloitte provides industry-leading audit and assurance, tax and legal, consulting, financial advisory, and risk advisory services to nearly 90% of the Fortune Global 500® and thousands of private companies. Legal advisory services in Germany are provided by Deloitte Legal. Our professionals deliver measurable and lasting results that help reinforce public trust in capital markets, enable clients to transform and thrive, and lead the way toward a stronger economy, a more equitable society and a sustainable world. Building on its 175-plus year history, Deloitte spans more than 150 countries and territories. Learn how Deloitte's more than 345,000 people worldwide make an impact that matters at [www.deloitte.com/de](http://www.deloitte.com/de).

This communication contains general information only, and none of Deloitte Consulting or Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms or their related entities (collectively, the “Deloitte organization”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and none of DTTL, its member firms, related entities, employees or agents shall be liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication. DTTL and each of its member firms, and their related entities, are legally separate and independent entities.