Automotive-Supplier

Transform and Perform

How automotive suppliers can keep pace in times of disruption and stringent OEM requirements

Porsche Consulting

Strategic Vision. Smart Implementation.

(1) CARRY ON.
(2) BEGIN.

Émile Chartier (1868–1951),
on the subject of what to do when facing change

INSIGHTS

//01

Only those who **transform** their business will bend and not break in the current automotive market.

//02

Commitment to excellence is more crucial than ever. The ability to **perform** highly efficiently is required to finance change.

//03

The time for decisive action is now.
Take a leap ahead by activating four main levers: Strategic transformation, innovation, high performance enterprise, sustainability.

Introduction

Fundamental change does not knock on your door to make itself heard.

Though the automotive industry has always been accustomed to planning ahead, it has never experienced change in such breadth and intensity as manifested in the trends of electrification, digitalization, and automated driving.

Pressure originating from these trends were coupled with various external shocks that weakened demand, stressed supply chains, and put automotive players at the brink of bankruptcy. The most recent external shock was the outbreak of COVID-19 with a corresponding market decline of more than 30 percent. But even before the first patient tested positive, OEMs and suppliers were confronted with decreasing EBIT margins and changing market conditions highlighted the urgent need for change. These conditions are quite diverse and range from macroeconomics (e.g., China's weakened economy) to policy shifts (e.g., increased unilateralism) to behavioral patterns (e.g., demand for alternative mobility concepts).

These are noteworthy "side effects" for an industry that has to cope with the greatest technological changes over the past century. Though electrification and its impact on companies in the powertrain sector are gaining further momentum as an agent of change, disruption affects the entire industry: our mobility mix is changing, and car and ride sharing have gained in importance—especially in the world's megacities. The desire for automated driving and connected vehicles is growing and new players sense their chance to attack established market participants. Data is now the new gold; new business models focusing on services promise significant revenue streams.[1]

SUPPLIERS NEED TO DEVELOP A CONSISTENT POSITIONING AND QUICK RESPONSE CAPABILITIES TO ASSERT THEIR STATUS IN THE VALUE CHAIN.

OEMs require radical change to avoid losing their position in the value chain to Google, Tencent, and other tech players entering the industry. They must act quickly to transform from hardware integration specialists to software experts and mobility providers. The same pressure to adapt business models and value propositions applies to automotive suppliers. This major shift in positioning not only costs courage and perseverance, but also a great deal of financial resources. Consequently, cost pressure will continue to rise, while at the same time placing tremendous demands on innovative strength.

Suppliers must therefore enhance the performance of their operations and at the same time foster new business ideas. Strategic transformation and balancing innovation and efficiency are highly complex topics to address simultaneously. Yet, there is an additional aspect that might prove to be the elephant in the room: sustainability is increasingly becoming a customer requirement—be it for environmental (e.g., fuel economy or CO_2 emissions requirements), social reasons (e.g., working conditions at sub-suppliers) or economic (e.g., life-cycle management). OEMs have put sustainability on their strategic agenda and are holding their suppliers to account.

[1] Global enterprise IoT spending in automotive will top 300bn USD in 2020, with a 40% CAGR from 2016–2020. Source: Statista

Transform and Perform

How Automotive Suppliers can keep pace in times of disruption and stringent OEM requirements

This paper describes **the impact of these rapid changes** on today's market environment and derives recommendations how suppliers **can boost performance and explore new horizons**.

This foresight is outlined along four pillars of Porsche Consulting's understanding of strategic positioning, which is based on approximately 400 projects per year with customers from the automotive industry.

In essence, Transform and Perform refers to the crucial duality that Federico Magno, Executive Director Mobility at Porsche Consulting, also summarizes as acting **"as efficiently as Toyota and as innovatively as a start-up."**

Figure 1. Four pillars to Transform and Perform

01 | Strategic Transformation

Challenge the robustness of your business model and positioning

CONTEXT **A scattered and unfocussed strategy definition is not sufficient to succeed in a fast-paced market environment.**

GOAL **Navigating through the end-to-end process of strategy development from as-is to future foresight to implementation process.**

The complexity of finding answers to disruptive change is placing a new kind of pressure on the organizations of automotive suppliers. Suppliers need to generate enterprise value and outperform their peers while readying their organization for the future. This pace can only be achieved with a consistent strategy across all organizational dimensions to optimize the company's positioning within the current competitive landscape.

Exemplary for this diversified environment is how most suppliers need to restructure their approach to software. While software was long a byproduct in automotive components, it is now essential—both for today's E/E architecture as well as for (end) user experience. Markus Duesmann, CEO of Audi AG, even goes as far as to say that "computing is the new horsepower."[2] Most automotive suppliers are thus facing a complex organizational shift to map software in their structures and processes—starting from R&D (e.g., functions and system integration) to quality (e.g., software quality management or cybersecurity) to sales and marketing (e.g., software as a product, or SaaP).

ZF Friedrichshafen is one supplier that has announced it will provide SaaP—in ZF's case, to optimize cross-system data transfer.[3] This paradigm shift requires careful strategic and organizational planning.

With the growing relevance of software for the end product, OEMs are increasingly developing and integrating software themselves to keep this growing aspect of value creation in-house. Despite this development, the software market for automotive suppliers keeps growing, as Elmar Degenhart (CEO of Continental) summarizes: "We expect the market for software to increase tenfold within the next five to ten years—even if the share of software sourced through suppliers decreases from 90 percent to 60 percent."[4] Similar tectonic shifts towards new value streams and business models are underway in the field of Internet of Things (IoT) and cloud services, especially with 5G technology as enabler.

"We expect the market for software to increase tenfold within the next five to ten years—even if the share of software sourced through suppliers decreases from 90 percent to 60 percent."

Elmar Degenhart,
CEO Continental

[2] https://www.reuters.com/article/us-audi-ceo-strategy/computing-is-the-new-horsepower-carmaker-audi-says-idUSKCN24V2F0
[3] ZF Press Release on SaaP: https://press.zf.com/press/en/releases/release_14029.html
[4] Interview in German newspaper Nordbayrischer Kurier https://www.kurier.de/inhalt.software-immer-wichtiger-conti-chef-brennstoffzelle-mehr-foerdern.674a5b43-058a-42c0-911f-817d377d4721.html

TRANSFORMATIONAL SUCCESS STARTS WITH CALIBRATING AN ORGANIZATIONAL COMPASS

As seen with challenges arising through software integration, accelerated market environments require strong focus on one key pillar of organizational success: fast adaptation. The capability to adapt and transform is an attribute companies can acquire but cannot copy.

Transformational success starts with calibrating an organizational compass:

Where do we stand and where do we want to go?

Porsche Consulting has identified three transformational archetypes that companies tend to follow.[5]

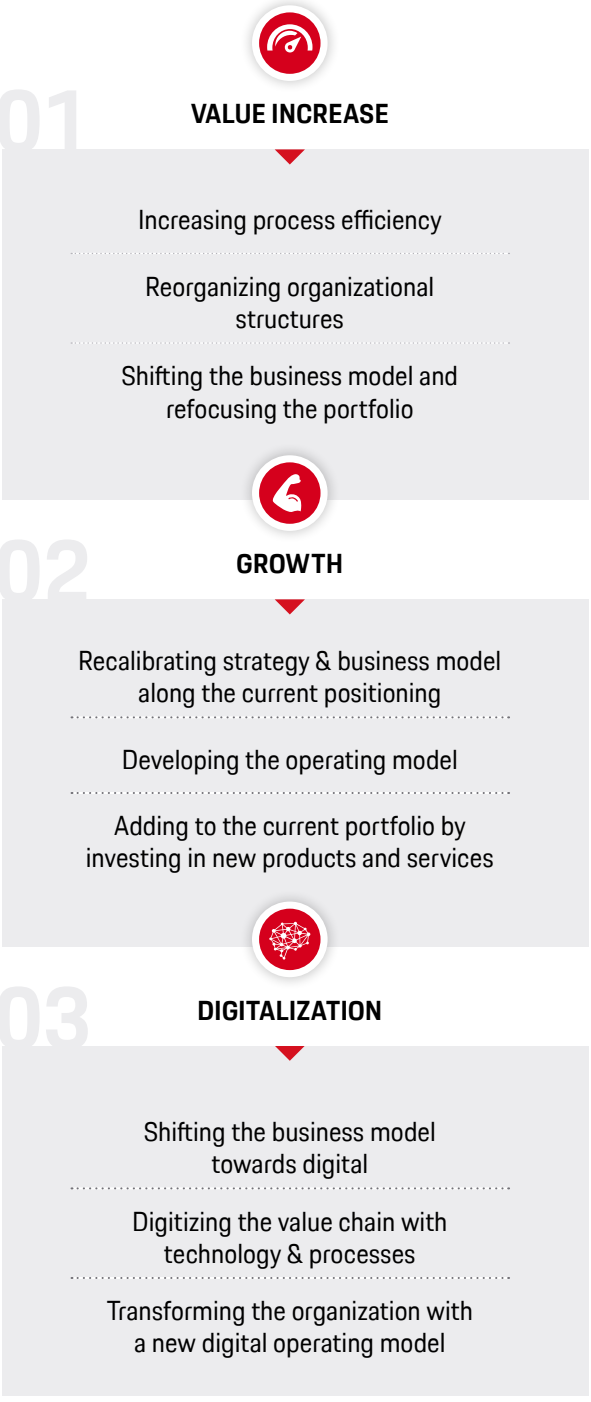


Figure 2. Porsche Consulting identified three transformation archetypes based on targeted effect

[5] A combination of characteristics from the three archetypes is also possible.

In sum, some companies focus on value increase through boosting profitability and cost efficiency while others target guiding the organization towards new growth opportunities. The third archetype follows a more radical approach towards digitalizing the business model as a whole.

German supplier Webasto is one of many examples of strategic transformation: the company expanded its portfolio from its core business—sunroofs and roof modules—towards new value streams in context of electrification. Webasto followed the growth archetype, increased R&D spending, and set clear priorities towards new products such as battery systems. Though currently responsible for a relatively small portion of Webasto's overall turnover (a projected 1 percent of 2020's total turnover), the portfolio calibration is set to be a revenue driver for the company (11 percent of order volume from 2020-2030 attributed to new technologies).[6]

The ability to adapt is closely linked to achieving organizational ambidexterity: being able to exploit current competitive advantages in the market—whether efficiency, product portfolio, or market access—while clearly aiming to explore innovative ways towards new value creation. Both in terms of strategy and organizational set-up.

During this year's Porsche Consulting Automotive Supplier Lounge, supplier representatives echoed that "the automotive industry is currently undergoing the greatest transformation imaginable" (Bernd Stephan, President Automotive & Aerospace, SKF) and that the price for such transformational change needs to be stemmed through an increase in efficiency.[7] Automotive suppliers are embracing the challenge to master this balancing act between the two poles of efficiency and transformation.

"The automotive industry is currently undergoing the greatest transformation imaginable."

Bernd Stephan,
President Automotive &
Aerospace SKF

CHANGE IS INEVITABLE. GROWTH IS OPTIONAL.

Strategic transformation can thus be understood as organizational framework that connects the capabilities needed to grow and succeed in times of disruption. It gives direction and structure to adapt to changing business environments. In this sense it is complementary to efforts fostering innovation, efficiency, and sustainability.

[6] Webasto Annual Report and Annual Press Conference, https://www.webasto-group.com/en/annual-press-conference-2020
[7] Quote provided during the Porsche Consulting Supplier Roundtable, February 2020

02 | Innovation

Ready your organization to become innovative

CONTEXT **Today's competence leaders fear to be tomorrow's followers as result of a passive "wait-and-see" approach.**

GOAL **Become an innovation-driven organization with increased speed, a competitive spirit and focus on technological growth.**

When it comes to exploring additional business segments or revenue streams in new markets with new customers, innovation capabilities prove to be another key element for success. MIT research based on data from 154 companies confirmed a positive correlation between companies' commitment to innovation (measured by ideation rate) and their financial results.[8] Innovative ideas drive growth, and companies that generate plenty of innovative ideas tend to be more profitable. Innovation thus becomes a source of competitive advantage.

With the increasing shift towards system and platform integration, faster development cycles and domestic competitors in every market, innovation has become a top priority of the agenda of senior executives for automotive suppliers. OEMs also have clear expectations towards supplier innovation, as outlined by Markus Schäfer, Member of the Board of Management of Daimler AG: "In order to fulfill our role as innovation and technology leader in the future, we also expect courageous impetus with inspiring visions in all areas from our partners."[9]

> **"In order to fulfill our role as innovation and technology leader in the future, we also expect courageous impetus [...] in all areas from our partners."**
>
> Markus Schäfer, CTO Daimler AG

INNOVATION IS THE KEY TO COPE WITH THE COMPLEXITY AND UNCERTAINTIES OF TECHNOLOGICAL DISRUPTION.

In short: innovation is the key to cope with the complexity and uncertainties of technological disruption. Some 85 percent of C-level executives in a recent Porsche Consulting survey agree or strongly agree that innovation is a central strategic advantage for business models and revenue streams.[10] The issue is that companies often have trouble fostering innovation and ignore the fact that each business unit might pursue varying and potentially conflicting innovation objectives.

New technologies, partners, and a higher share of software increase the complexity of supply chains. Pairing supplier integration with strategic supplier development, especially when going local for local, becomes a primary goal of OEM purchasing organizations. One head of R&D of a German automotive supplier underlines this vital importance, stating that "we require innovation. Markets are constantly evolving and change occurs regardless of whether we take part or not." Being able to industrialize components of high complexity with suppliers not used to automotive grade manufacturing, as for example with start-ups developing sensors for automated driving, is one such flexibility that is required.

[8] Are Innovative Companies More Profitable?—MIT Sloan Management Review, December 2017
[9] Daimler Supplier Award 2020, https://supplier-portal.daimler.com/docs/DOC-1864
[10] Porsche Consulting conducted a survey with 43 C-level executives of global automotive suppliers across all segments in 11/2018

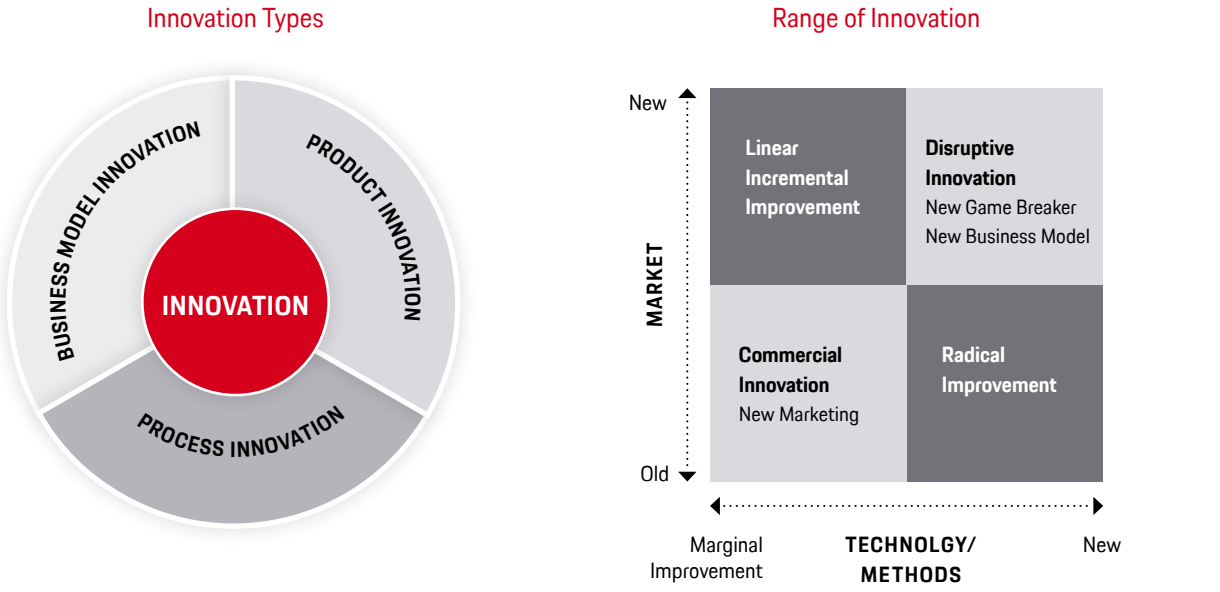


Figure 3. Innovation types and range of innovation according to Porsche Consulting

In principle, we see three different types of innovation; each can vary in range depending on the applied scope (market vs. technology/methods). With the emergence of data-heavy trends of the connected car and automated driving, we see that **business model innovation** is highly sought after. Suppliers are required to tap into markets that promise higher margins than traditional hardware components. This is particularly the case for business segments involving electrification, digitalization, and automated driving as well as for mobility services. Subsequently, disruptive innovation such as pivoting towards SaaP (see Chapter 1) is becoming more common.

Volkmar Denner, CEO of Bosch, is referring to the necessity to explore new fields of revenue streams when he states "as innovation leader, we are helping to shape the move to alternative mobility and seizing the opportunities this presents." [11]

Innovation also orbits around classic **product innovation** aiming to market with new products. The range of product innovation can of course vary from adding another product to existing segments to going a more radical route with integrating technology new to your portfolio. However, organizations cannot limit themselves to adding innovation from a portfolio perspective—they need to foster intrinsic innovation.

DON'T SIMPLY ADD INNOVATION. BECOME INNOVATIVE.

Thinking in new (and likely digital) processes and working methods is a prerequisite to becoming truly innovative. A focus on **process Innovation** empowers suppliers to react to, and potentially anticipate, trends and customer needs. Such adaptability often becomes a deciding factor—especially in times when long development cycles are being replaced by over-the-air product updates and feature purchases. One example of process innovation is the increased use of 3D printing for pistons, leading to significant reduction of weight and increased performance. German suppliers Mahle and Trumpf recently teamed up with Porsche to go beyond prototype and sample builds towards use of such additive manufacturing processes in series production. A somewhat radical albeit logical step of making use of new technology and methods.

[11] Press Release Bosch, https://www.bosch-presse.de/pressportal/de/en/business-year-2019-206656.html

It becomes clear that a mix of these innovation types is required to deploy an innovation boost. In order to assess how such innovation can be cultivated, we need to look at available levers and guiding principles:

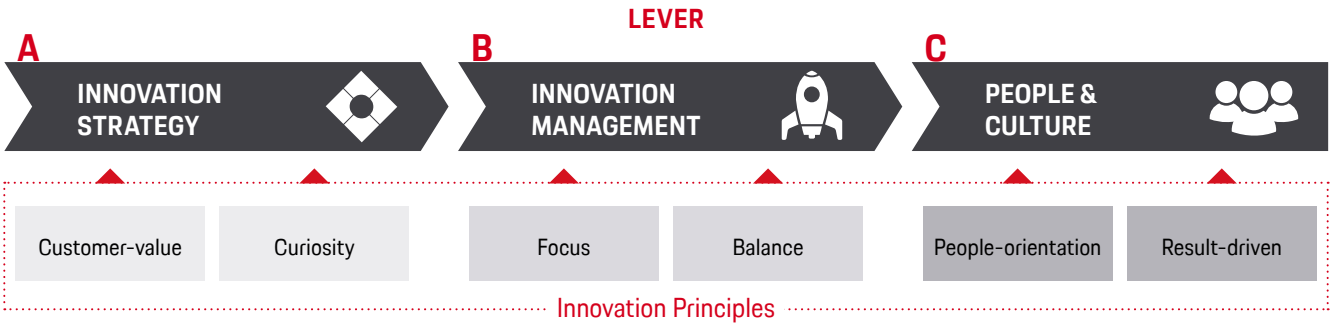


Figure 4. Innovation principles as a basis for creating an innovation driven-company

Setting up an innovation system requires consistent linkage to innovation principles across the pyramidal layers of the company (from strategy to people and culture): an **innovation strategy** needs to define clear goals and guidance towards internal innovation (cascaded from the business division level to the product level) and external innovation (aimed at a partnership approach and M&A). These goals mainly circulate around speed, competitiveness, and coping with complexity. To ensure that they are actively pursued by and pushed through the organization, interdisciplinary innovation units can act as anchors. These units should be granted certain freedoms and flexibility while being led by an overall governance model, likely headed by an innovation strategy board.

Processes and methods of this internal **innovation management** act as a railing for the idea funnel. Lastly and most importantly, employee buy-in to a collaborative and sharing mindset is a condition to create an innovation-friendly habitat. Setting (and nurturing) **culture** is absolutely key to succeed.

Partnerships as well as open innovation platforms (OIPs) can also enhance the strategic agenda of suppliers and add to the established portfolio. Some OEMs and large suppliers operate their own ecosystems—like Bosch with its Bosch Corporate Innovation Gateway. In Germany, the innovation platform Startup Autobahn connects established players of the industry with promising start-ups exploring connectivity or mobility services.[12] With this mediator approach, the platform is attracting industry heavyweights such as Daimler, Porsche, and Hyundai as well as suppliers like Bosch, Eberspächer, Faurecia, and Webasto seeking the opportunity to improve innovation with the help of start-up companies. Matthias Arleth, Deputy Chairman of Webasto, summarizes the effect of such platforms as "the opportunity to search for game-changing ideas outside of Webasto, find them, and ultimately integrate them into our ecosystem."[13] One should note that identifying such promising ideas is just the first step of the journey to sustained success. These products then still need to prove that they can be profitable (see Chapter 3), provide customer value, and fit into the sustainability strategy of the company (see Chapter 4).

> **"We face the unique opportunity to search for game-changing ideas outside of Webasto, find them, and ultimately integrate them into our ecosystem."**
>
> Matthias Arleth,
> Deputy Chairman Webasto SE

Be it through a collaborative or singular approach, companies need to harmonize all relevant levers to ensure lasting innovation power—a focused innovation strategy, meaning efficient innovation management that integrates organizational and process needs as well as setting sights on people and culture.[14]

[12] Similar platforms connecting OEMs, suppliers, and technology companies have developed in other markets. Apollo, Baidu's open-source platform for automated driving and V2X, is another noteworthy example of collaboration.
[13] Webasto press release, https://www.webasto-group.com/en/press/press-releases/press-release/zukunftsweisende-gemeinschaftsprojekte-von-webasto-und-jungen-unternehmen-auf-dem-startup-autobahn-expo-day/
[14] In this context, "people and culture" mainly refers to improving employee motivation through a combination of training, collaboration, and flexible resource allocation. Key goals are an increase in productivity and a reduction of unwanted attrition.

INNOVATION NEEDS TO OUTLINE A CLEAR PATH TO PROFIT.

Future success, specifically in terms of playing an active role in electrification, automation, and digitalization of the car, is ultimately achieved by establishing overarching innovation management and fostering a lively and self-driven innovation culture.

Though complex in terms of planting its seeds into the organization, the goal of innovation is clear: **innovation needs to outline a path to profit and should not become an end in itself.**

One should note that this path can be diverse:

- IT CAN BE BASED ON A CLASSIC BUSINESS CASE
- GO THE ROUTE OF A MINIMAL VIABLE PRODUCT (MVP)
- OR, INCREASINGLY IMPORTANT, FOSTER SUSTAINABILITY AS MEANS TO INCREASE EFFICIENCY AND CUSTOMER APPEAL

(see Chapter 4)

03 | High-Performance Enterprise

Increase efficiency to secure competitiveness

CONTEXT **Uncertainty how to design corporate organizations to speed up decision-making and increase cost efficiency despite rising complexity.**

GOAL **Transform into a high performance enterprise that has streamlined processes, structure and roles along customer needs and efficiency.**

Approximately one-fourth of all companies in automotive consider their existence at risk.

All efforts to establish the right strategic positioning and innovative products or services are in vain if a company cannot stem them organizationally or worse, financially. Having the will and the means to tackle such transformation is not an easy task for automotive suppliers in context of enormous price pressure from customers and global competition. Technological disruption, consumer behavior changes, and market turmoil have even amped up the pressure. Recent studies conducted by Germany's Ifo Institute revealed that roughly one-fourth of all companies in automotive consider their existence at risk and that 5–16 percent of automotive-related jobs in Germany could become obsolete.[15] It is therefore more important than ever to work highly efficiently and avoid wasting any resources that could be re-invested in future growth.

Figure 5. The Porsche Consulting approach to designing future-oriented organizations

[15] Wirtschaft unter Schock—Finanzpolitik hält dagegen, Ifo Institute, April 2020, pp.71-79.

Porsche Consulting follows an approach of five levers to master strategic challenges along best practices. The design of a high-performance enterprise starts with its strategic orientation and business model. Chosen objectives and organizational form determine how well the respective company can cope with strategic challenges such as digital transformation, speed of innovation, or increasing product complexity.

01 STRUCTURE

Derived from their business model and strategic orientation, suppliers must develop the right organizational structure enabling them to succeed in changing market environments. This includes reflecting whether their macro structure and level of regional and/or functional autonomy still matches OEM requirements with fast development cycles and connected supply chains. The customers' desire for flexibility, in terms of delivery speed and small, individualized quantities, will continue to increase. On the other hand, as evidenced through COVID-19, OEMs will increasingly focus on ensuring stability along their entire supply chain.

These requirements mean that suppliers will have to make new make-or-buy decisions, for example by increasingly relying on multi-sourcing and thus securing local supply chains. Structures become decentralized; decisions need to be made faster, regional, and autonomous.

OEMs echo similar expectations towards their suppliers. Herbert Diess, CEO of the Volkswagen Group, stated that "we need powerful and reliable partners at our side, because the transformation of our industry is gathering pace. In the future, agility, innovative strength, and entrepreneurial courage will be even more important."[16]

"We need powerful and reliable partners at our side, because the transformation of our industry is gathering pace. In the future, agility, innovative strength, and entrepreneurial courage will be even more important."

Herbert Diess,
CEO VW Group

02 PROCESSES

Secondly, suppliers must establish high-performance processes that meet all customer requirements as best as possible while also generating profits to finance investments aimed at future growth. Achieving both, especially in context of globalized footprints and supply chains, is an exceptionally difficult task. Agile and waste-free processes that can be adapted locally and follow lean principles can provide crucial support for mastering this challenge.

Often this improvement process starts with general efficiency programs that are then extended to production and quality levels. OEMs want to be involved in an end-to-end process with the supplier in order to create maximum transparency. Agile yet reliable, best data-supported. Examples of such a partnership model are collaborative development processes with OEMs on joint platforms.

[16] Quote provided during the VW Group Awards, https://www.volkswagenag.com/en/news/2018/05/Group_Award_2018

03 PEOPLE

Increased self-organization and daily learning will become an integral part of successful companies. New technologies and working methods require the continuous development of the workforce. This collaborative approach needs to be lived out by managers who should focus on engaging, empowering, and motivating the organization instead of micromanaging.

We strongly believe that aligning people is the prerequisite for high performance at the employee level and across the organization. For Volkmar Denner, CEO of Robert Bosch GmbH, a qualified workforce is a strategic success factor for mastering current and future challenges: "Bosch sees itself as a learning organization in which learning is integrated into day-to-day work."[17]

> **"Bosch sees itself as a learning organization in which learning is integrated into day-to-day work."**
> Volkmar Denner,
> CEO Robert Bosch GmbH

04 GOVERNANCE

If people and products are a company's engine, then governance can be understood as the steering wheel. A well-balanced organization that maximizes structural stability and process discipline is a condition for success, especially if said company has a footprint spanning across different regions and markets. Increased touchpoints with the start-up ecosystem, be it through partnerships or M&A, underline the importance of incorporating business models and business divisions of varying working logic and speed.

AS MUCH DECENTRALIZATION AS POSSIBLE, AS MUCH CENTRALIZATION AS NECESSARY.

Coroplast, a global supplier for wires, cables, and tapes, is an example for a company that is undergoing a transformation with a focus on its governance structure. Three independent business units led by a holding company are being established. Interfaces between the holding company and the business units were precisely defined based on the principle of "as much decentralization as possible, as much centralization as necessary."

Positive effects include increased flexibility in decision-making, intensified customer relationships, and much smoother integration of external innovation through partnerships or acquisitions.[18]

[17] Bosch press release, https://www.bosch-presse.de/pressportal/de/en/tackling-the-transformation-responsibly-bosch-is-investing-in-people-innovations-and-the-environment-207004.html
[18] Interview with Coroplast CEO Natalie Melkenburger, https://www.porsche-consulting.com/de/medien/pressemitteilungen/detail/coroplast-traditionsunternehmen-als-spitzenreiter/

05 DIGITALIZATION

The term digitalization has transitioned from buzzword to essential hinge of business models and corporate culture alike. Today, a company's digital agenda must cover all strategic digitalization areas, addressing efficiency, growth, and customer experience. While the digital maturity and its link to the respective corporate vision may differ from company to company, it is clear that all business areas face digital change. Everything that can be digitalized, will be digitalized. The question is whether companies consider it as disruptive stress or as an engine of business potential.

EVERYTHING THAT CAN BE DIGITALIZED, WILL BE DIGITALIZED. THE QUESTION IS WHETHER COMPANIES CONSIDER IT AS DISRUPTIVE STRESS OR AS AN ENGINE OF BUSINESS POTENTIAL.

For automotive suppliers, digitalization is often linked to their operational agenda. Whether it's through data-driven process optimization, smart factory concepts, or data analytics for quality control, there is plenty to optimize and analyze. OEMs have already raised their hands to make use of these data pools to optimize production and logistics.

The example of digitalization and the corresponding linkage between OEMs and suppliers underline the importance of transparency and traceability. These traits are not only requirements that OEMs articulate in context of supply chain management or quality. Data exchange with a focus on sustainability is being greatly intensified (see Chapter 4).

As outlined, all five levers address strategic challenges that automotive suppliers face in context of today's highly complex business environment. While mainly pulling levers related to improving efficiency, they also link with a variety of OEM requirements. As such they can be understood as crucial focus points to address all levels of your business—internal as well as external.

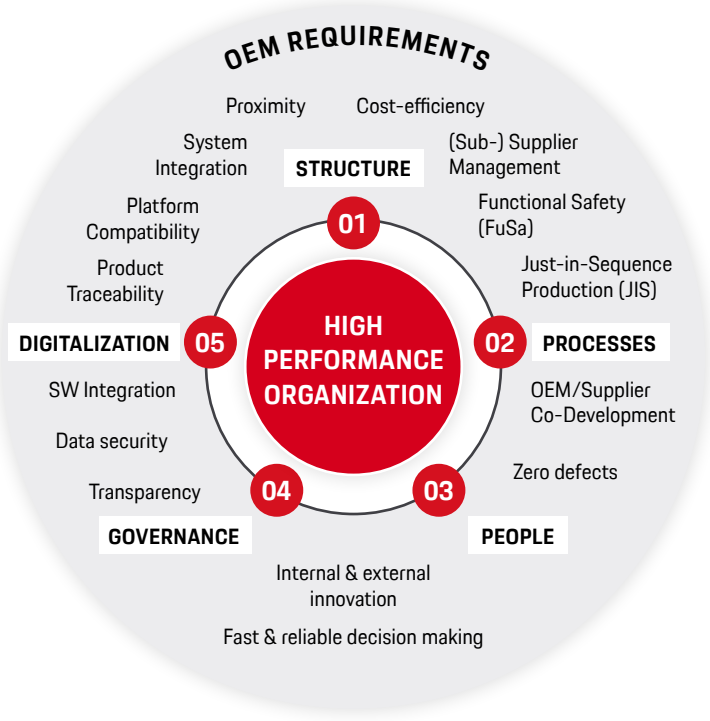


Figure 6. Illustrating how the five performance levers interlink with OEM requirements

Driving a company towards becoming a high performance enterprise outlines major improvements in efficiency. Pulling the described five levers of Porsche Consulting is the first mile on the road towards reaching those improvements.

04 | Sustainability

Ensure equal consideration of environmental, social, and economic values

CONTEXT **Sustainability efforts are not (yet) being addressed strategically on corporate level and only attend to selective aspects.**

GOAL **Approach sustainability holistically to cover environmental, social and economic aspects for the benefit of the company.**

In order to remain competitive, it is critical for automotive suppliers to:

- FULFILL MINIMUM SUSTAINABILITY REQUIREMENTS AS AN ENTRY POINT FOR ANY DISCUSSION WITH OEMS AND FINANCIAL INVESTORS
- OFFER BENEFITS FOR THEIR CUSTOMERS IN SUPPORTING THEM TO ACHIEVE THEIR TARGETS BY GENERATING MEASURABLE IMPACT THROUGH SUSTAINABLE PRODUCTS AND TECHNOLOGIES
- MAKE A DIFFERENCE AND GENERATE A USP IN COMBINING ENVIRONMENTAL, SOCIAL AND ECONOMIC ASPECTS

Sustainability is perceived as one of the biggest challenges of our times. Increasing pressure from different stakeholders such as society, politics, consumers, employees, or financial investors is forcing the whole economy to rethink their business models and put emphasis on the **environmental**, **social**, and **economic** aspects of sustainability. The consequences for companies are substantial and require a fundamental paradigm shift to generate effective solutions and change established behavior.

Due to its economic importance, global interconnectedness, and its impact on society and environment, the automotive industry is affected by this transformation to a large extent. Not only OEMs but the entire value chain encompassing all supplier levels are asked to contribute to a more sustainable future of the industry. Therefore, human rights, fair working conditions, anti-corruption, as well as limited environmental and climate impact has to be on top of the CEO agenda.

Sustainability is a topic that can only be handled in a partnership approach, integrating all players in the value chain. It is about identifiying the best option together instead of working against each other.

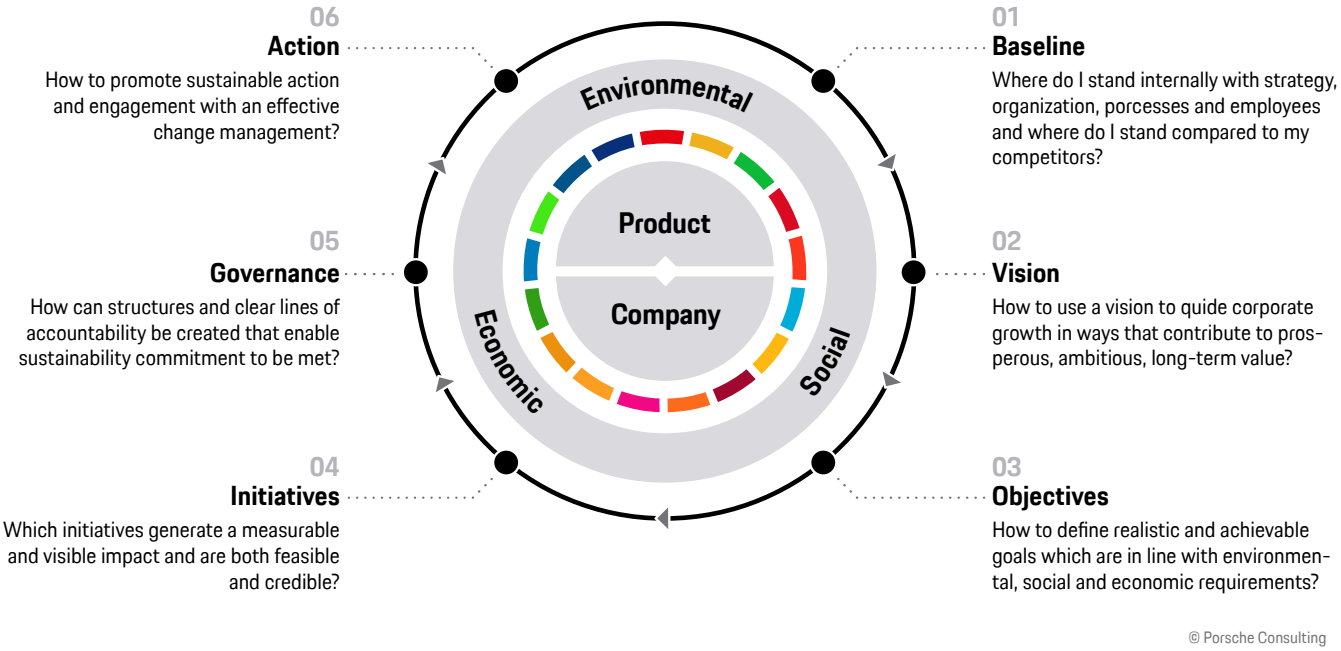


Figure 7. Porsche Consulting's framework along the three dimensions of sustainability following the United Nation's 17 Sustainable Development Goals (SDGs)

"The S-Rating* enables us to elevate the issue of sustainability in procurement to the same level as the factors of quality, cost, and punctual logistics."

Uwe-Karsten Städter, Member of the Executive Board of Porsche AG responsible for Procurement

* Sustainability Rating

Volkswagen, as the world largest OEM, has incorporated sustainability as a corporate target equally important as profitability and other classic corporate goals: "Our stated goal is to transform Volkswagen into our industry's leading company in terms of profitability, innovative power, sustainability, and customer satisfaction."[19]

In most cases, today's relationships between OEMs and their suppliers/partners are still determined by economic aspects, i.e., costs, the fulfillment of technical requirements, and the assurance of quality and delivery capability. But times are changing and OEMs have started to take sustainability aspects increasingly into account when selecting their suppliers. Uwe-Karsten Städter, Member of the Executive Board of Porsche AG responsible for Procurement, states that the sustainability rating "enables us to elevate the issue of sustainability in procurement to the same level as the factors of quality, cost, and punctual logistics."[20]

The new evaluation criterion also includes a demand for increased transparency, e.g., regarding the sources of raw materials and compliance with regulations regarding human rights standards and efficient use of resources. While the fulfillment of minimum sustainability requirements will ensure access for suppliers to OEMs, established decision criteria will probably continue to influence the awarding of contracts. But offering innovative solutions that go beyond classical criteria and integrate sustainability aspects can be a competitive advantage for suppliers. Therefore, it is critically important for suppliers to find their optimum between environmental, social, and economic aspects and to implement the requirements for good corporate governance.

[19] VW Group press release, https://www.volkswagenag.com/en/news/stories/2018/08/volkswagen-must-become-far-more-efficient.html
[20] Porsche AG press release: Sustainability as important for Porsche as top quality, https://newsroom.porsche.com/en/2019/sustainability/porsche-sustainability-s-rating-suppliers-partner.html

IT IS CRITICALLY IMPORTANT FOR SUPPLIERS TO FIND THEIR OPTIMUM BETWEEN ECONOMIC, ENVIRONMENTAL AND SOCIAL ASPECTS.

"Our understanding of sustainability is not limited to reducing the emissions of our vehicle fleet. Our sights are focused on the entire value chain. [...] Our suppliers must commit to the BMW Group's high sustainability standards."

Oliver Zipse, CEO BMW Group

OEMs are convinced that sustainability is becoming a decisive business factor and a sustainable supplier network is a guarantee for long-term success. Oliver Zipse, CEO of the BMW Group, summarizes: "Our understanding of sustainability is not limited to reducing the emissions of our vehicle fleet. Our sights are focused on the entire value chain. [...] Our suppliers must commit to the BMW Group's high sustainability standards." [21]

The options for contribution are manifold and must be carefully selected in accordance with the corporate strategy, one's own potential impact, and resource requirements. A clear vision, strategic objectives, and effective initiatives enable a consistent and continuous implementation in the supply chain, the product, and within one's own organization.

Climate protection is surely the leading dimension of sustainability in the automotive industry. The transportation sector accounts for 24 percent of the global greenhouse gas emissions, with 18 percent directly linked to road transportation.[22] In consequence, the industry is legally obliged to reduce their emissions and car manufacturers worldwide are confronted with significant financial penalties if they fail to meet their CO_2 fleet targets. Many OEMs target a "net zero" approach to become carbon-neutral and flank measures in operations, the supply chain, or at the product design stage with close monitoring of social and ethical compliance.

The electrification of the drive system and a consistent decarbonization of the entire value chain is the key to achieving CO_2 targets, representing a challenge for both OEMs and suppliers. On the other hand, suppliers can benefit from new opportunities to open up new business fields and reposition themselves in the competition for future business.

In order to offer carbon-free products, for example, suppliers must steer product design accordingly in the early stages of development. In addition to classical criteria such as cost or weight of the products, the Product Eco-Design method also takes into account the carbon footprint from raw materials from production to recycling. Furthermore, a simultaneous CO_2 calculation supports the decision-making process and innovation management is required to ensure that every product and process is becoming more sustainable than the one before.

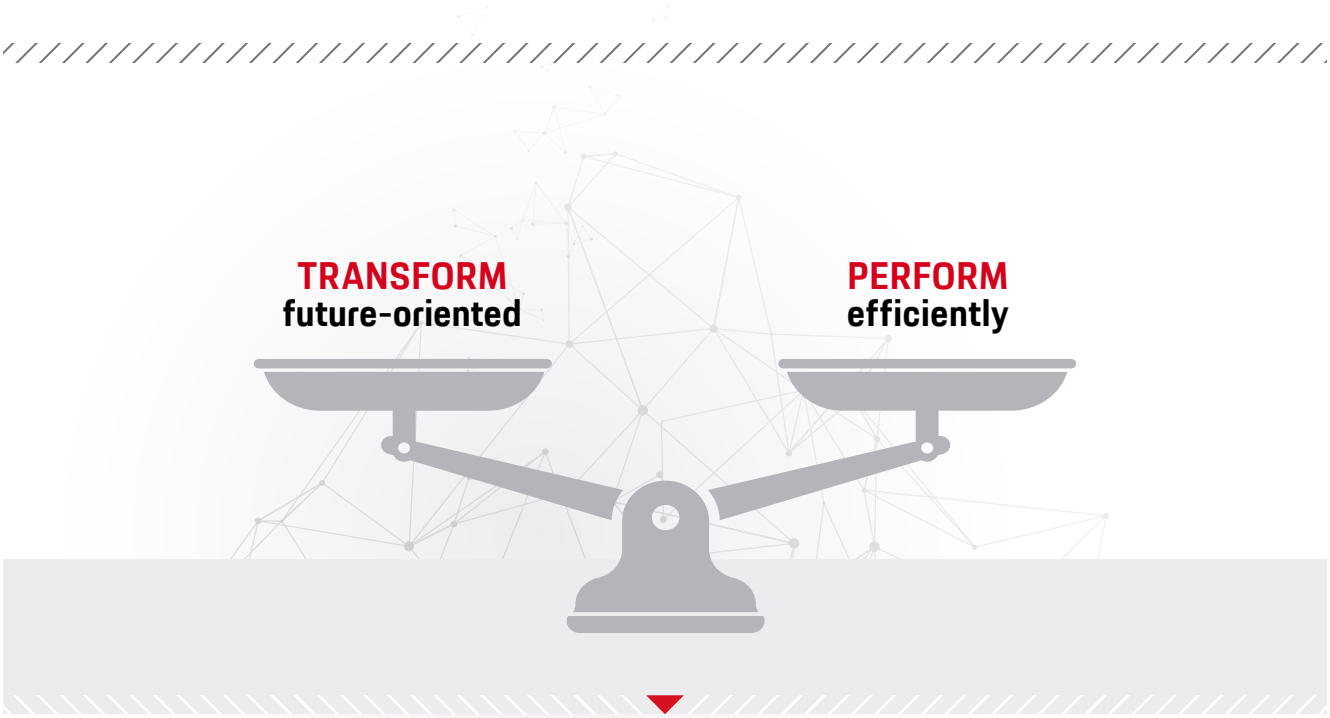
Optimizing the entire supply chain is another field of action that offers great opportunities to influence environmental impact and resource usage, for example by the selection of raw materials, manufacturing processes, and shortening transport and logistics chains. In addition to addressing the environmental aspects of sustainability, companies should ensure the basic principles of ethical conduct, such as the observance of human rights and fair working conditions, and avoid corruption in their supply chains. As the successful transformation of the automotive industry relies on the entire ecosystem it is vital for every participant to support the change in the best possible way, and identify the initiatives where they contribute most.

[21] Sustainability at the BMW Group, https://www.bmwgroup.com/en/responsibility/sustainability-at-the-bmw-group.html
[22] Statista

Beyond being a favorite partner for the OEM, sustainability has further potential to serve other stakeholders. For example, sustainability contributes to both the financial rating and company value, and can have a positive influence on the definition of conditions when procuring financial resources. Furthermore, sustainability plays a major role for young professionals in terms of employer attractiveness, which can have an impact on recruitment and retention of employees. Finally, sustainability plays a role for more and more end customers.

Sustainability is an overarching topic that is part of every aspect of business—from corporate strategy to every employee in every process. To achieve the impact that is needed on a global basis, sustainability must be embedded into the company DNA and everybody's mindset, becoming part of day-to-day business; and it has to be addressed as a global challenge across company borders.

Sustainability is a challenge that requires paradigm change and strategic transformation impacting business models, processes and corporate strategy altogether along all levels of the value chain. It is crucial to understand that the three elements of sustainability—intelligentyl linked—also represent promising levers to boost customer and employee satisfaction, innovation strength and, in summary, earnings and long-term enterprise value.



Successful organizations are capable of achieving efficiency in their existing business while at the same time having strategic foresight to innovate and explore new businesses.

Figure 8. Suppliers face the challenge to Transform and Perform

IN BRIEF

01 Adaptability in terms of organizational development and strategy is key. The ability to adapt is an attribute companies need to acquire and cannot copy.

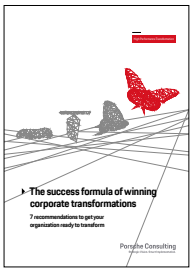
02 Strategic transformation requires ambidexterity to exploit established business models, products or services, and to explore ways towards new value creation.

03 Innovation must be considered a source of competitive advantage. Most successful businesses have an idea for the future that is different from the present.

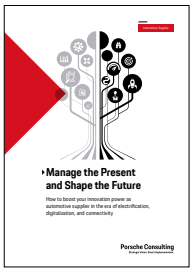
04 Establishing a company with a clear focus on agility, waste-free efficiency, and customer centricity will improve margins.

05 Sustainability can significantly increase long-term business value by addressing all three of its dimensions (environmental, social and economic).

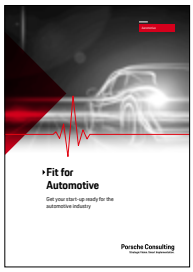
Further reading



Strategy Paper
Strategic Transformation



Strategy Paper
Automotive-Supplier Innovation



White Paper
Fit for Automotive

Study
High Performance Organization

Porsche Consulting Magazine
Sustainability – Now more than ever

Authors

Dr. Jens-Holger Dodel
Senior Partner
Automotive/Mobility

Martin Kieckebusch
Partner
Automotive/Mobility

Birgit Engler
Partner
Automotive/Sustainability

Benedikt Senger
Manager

Phil Növer
Consultant

Contact
+49 1523 911-1898
jens-holger.dodel@porsche-consulting.com

Acknowledgements

The authors thank the contributors Benedikt Hauger, Jozef Jurk, Cassian Stanjek, Virginia Vater, and Moritz Wiegmann.

Porsche Consulting

Porsche Consulting GmbH is a leading German strategy and operations consultancy and employs 670 people worldwide. The company is a subsidiary of the sports car manufacturer Dr. Ing. h.c. F. Porsche AG, Stuttgart. Porsche Consulting has offices in Stuttgart, Hamburg, Munich, Berlin, Frankfurt am Main, Milan, Paris, São Paulo, Shanghai, Beijing, Atlanta, and Belmont (Silicon Valley). Following the principle of "Strategic vision. Smart implementation," its consultants advise industry leaders on strategy, innovation, performance improvement, and sustainability. Porsche Consulting's network of 12 offices worldwide serves clients in the mobility, industrial goods, consumer goods, and financial services sectors.

Strategic Vision. Smart Implementation

As a leading consultancy for putting strategies into practice, we have a clear mission: We generate competitive advantage based on measurable results. We think strategically and act pragmatically. We always focus on people—out of principle. This is because success comes from working together with our clients and their employees. We can only reach our aim if we trigger enthusiasm for necessary changes in everyone involved.

Porsche Consulting

Stuttgart | Hamburg | Munich | Berlin | Frankfurt a. M. | Milan | Paris | São Paulo | Atlanta | Palo Alto | Shanghai | Beijing

www.porsche-consulting.com