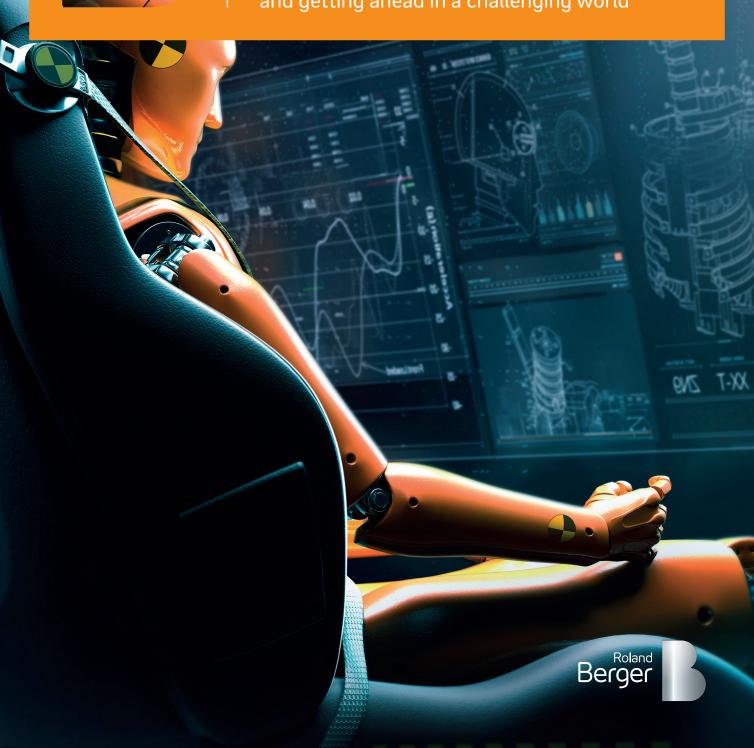


## Focus

Roland Berger

**Automotive suppliers** | Achieving resilience and getting ahead in a challenging world



## **Automotive suppliers** / Achieving resilience and getting ahead in a challenging world

This study deals with the robustness of automotive supplier organizations. We define robustness as the ability of an organization to adapt, develop, and evolve, navigating uncertainty while preserving its functioning, competitive stance, and long-term growth. In essence, being robust means that companies are able to remain standing as the ground shifts beneath them.

The study covers industry background and the need for change, our proven model for assessing and improving robustness, current supplier performance, supplier strengths and weaknesses, and real-life examples. In particular, we consider robustness in the context of suppliers' operating models, including organizational structures, processes, systems, etc.

The focus lies on internal robustness and not the external perspective concerning the business model (strategy, product portfolio, etc.). As a result, we discuss the business model implications of automotive industry trends only in passing, concentrating instead on the operating model implications these trends may have. In short, our aim is to support automotive suppliers in defining their operating model based on their (already defined) business model.

#### 4 1 Robustness matters

Automotive suppliers face their greatest challenge and must adapt to survive

#### 8 2 The Roland Berger Robust Organization Framework

Our approach to assess and improve robustness

#### 14 3 How automotive suppliers perform

Current robustness levels, strengths, weaknesses, and success stories

#### 20 4 What to do next?

The benefits of a robust organization – and how to get started

1

Robustness matters / Automotive suppliers face their greatest challenge and must adapt to survive

he automotive industry is changing at a pace not seen since the introduction of mass production. Trends such as electrification, autonomous driving, and connectivity are shaking up the way vehicles are built and driven, forcing OEMs and suppliers to adapt to the new landscape.

Six key drivers are behind this radical change. First, regulatory bodies around the world, including the European Union, are drastically tightening rules on emissions. This is effectively calling time on the internal combustion engine. However, the supply of components for internal combustion engines is at the heart of most suppliers' business.

Second, capital is increasingly flowing towards electric car producers rather than traditional manufacturers. This is reflected in the enormous valuations of new electric-only companies such as Tesla and Rivian, which are entirely outsized compared to the number of vehicles they produce. Similarly, suppliers of critical electric vehicle parts benefit from these strong capital inflows. The stock market prices of traditional auto suppliers, on the other hand, are depressed, making acquisitions in future-oriented business areas all but impossible.  $\rightarrow A$ 

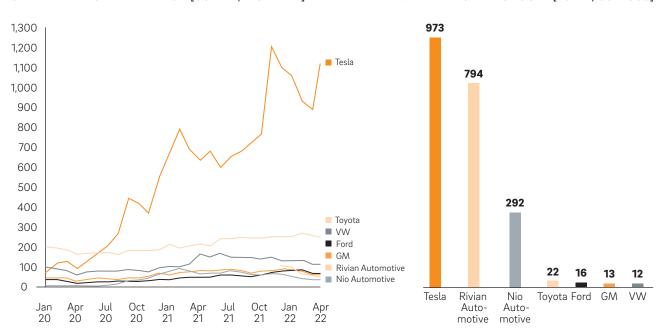
Third, technologies are rapidly advancing. Software, for example, is overtaking hardware in importance as it can improve the output of hardware systems, from

#### A: In the money

New electric-only automakers are achieving huge valuations despite their low production output

#### **OEM MARKET CAPITALIZATION** [USD BN, MONTHLY]

... PER VEHICLE PRODUCED [2022E, USD '000]



Source: Capital IQ, IHS, Roland Berger Automotive suppliers | 5

powertrains to sensors and suspension. Combined with increasing connectivity, software-centric vehicles are becoming part of a new digital automotive ecosystem. This is leading to a shift from traditional development cycles to continuous updates. Most suppliers, however, are clinging on to their traditional product development process (PDP) standards. These stability-oriented, slow-moving procedures are incompatible with the development speed and update needs of software. Suppliers need to become software companies to survive.

Fourth, OEM preferences are evolving. A divergence of OEM value chain coverage (make-or-buy decisions) is forcing suppliers to broaden their range of offerings while not being able to sell their products and services to all customers in a similar way. And as OEMs change their sales channels (platforms, aftermarket), suppliers need to adapt their approach here, too.

Fifth, energy and material prices are spiraling. The rise in costs that began in 2021 has accelerated since Russia's invasion of Ukraine, putting unprecedented pressure on suppliers. Prices will remain high and volatile as Europe strives for higher energy independence and moves towards renewable energy.

Finally, sustainability will remain as a mega trend and will dramatically change the way suppliers are running their business. Demand for supply chain transparency and a review of energy sources used will add additional costs to suppliers that will be difficult to pass through to customers.

Energy and material prices are spiraling. The rise in costs that began in 2021 has accelerated since Russia's invasion of Ukraine, putting unprecedented pressure on suppliers.

### WHY SUPPLIER ORGANIZATIONS NEED TO BE ROBUST

The net effect of these drivers is that all suppliers, particularly those of traditional powertrain components, must overhaul their operating models in order to adapt and innovate. All parts of the organization need to understand the magnitude and direction of change – and adapt accordingly.

Revenue pools, for instance, will likely change. The shift to service models, such as predictive maintenance, will require new sales and delivery approaches, and strategic decisions will have to be made on business areas that do not conform with the new model.

Cost structures are also rapidly evolving. Overall rises in factor costs (raw material, labor, ...) due to resource scarcity and driven by lavish government spending put pressure on suppliers' P&Ls. New costs are being added, too. Think of costs for sustainability and supply chain transparency, risk management, or additional regulatory fees.

Investments will also have to be rethought. Core vehicle technologies, such as powertrains, are currently undergoing an intense phase of innovation due to electrification and autonomous driving, resulting in high investment needs with high uncertainty levels. Meeting these often requires pre-financing over several years.

These changes are being forced on suppliers at a time when they are already fully stretched. Disrupted supply chains, the coronavirus pandemic, surging factor costs, and a shortage of semiconductors have hamstrung companies for months, with no end in sight. Other external factors, such as the Ukraine crisis, are also having an impact, further raising insecurities for automotive suppliers.

The need for action is clear, especially with regard to a new target operating model. Business model transformation is already underway across the supplier industry and most players have defined their pathway to navigate the transition. But we believe that organizational robustness is as important as strategy, and often underestimated. The target areas for robust organizations look different depending on the business model: If the overall strategy (that is, business model) is expected to remain rather stable in the long term, the related operating model needs to ensure efficiency and stability as the main target. By contrast, a supplier experiencing a strong shift in its business model would have different targets for its operating model, ranging from flexibility to speed and innovation. As such, the definition of the operating model can only take place when the business model is clear - and requirements have to be set accordingly.

This study aims to help suppliers become more robust in terms of their operating model. In Chapter 2 we outline our framework to gauge an organization's level of robustness, and in Chapter 3 we use it to evaluate the current status of the supplier industry, including giving several examples of robustness best practice. The final chapter summarizes the main benefits of a robust organization and how to realize them.

2

# The Roland Berger Robust Organization Framework /

Our approach to assess and <a href="mailto:improve">improve</a> robustness

he Roland Berger Robust Organization (RO) Framework determines a company's robustness maturity level and equips it with the levers to improve. The model works by first using a survey-based maturity tool to analyze the company's performance in the six core dimensions of a robust organization. The results are then used to assess the company's ability to react and adapt to future challenges. This enables companies to be characterized as one of five RO archetypes, ranging from organizations that have multiple areas for improvement

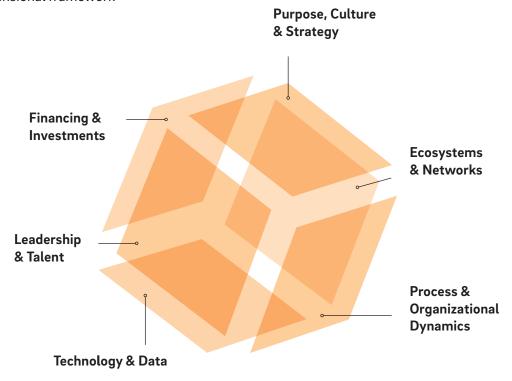
to those that thrive on change. The benchmarking process provides any company with clear areas of action to facilitate improvement.

#### THE SIX CORE DIMENSIONS

Robustness builds on six key dimensions of a company's functioning: Purpose, Culture & Strategy; Ecosystems & Networks; Process & Organizational Dynamics; Leadership & Talent; Technology & Data; and Financing & Investments. → B

#### **B:** The Roland Berger robustness approach

A multidimensional framework



Source: Roland Berger

#### **Purpose, Culture & Strategy**

Having an inspirational shared purpose is important for all stakeholders, from customers to investors and communities, as it allows efficient alignment. At the same time, a company's culture is key for building a dedicated and motivated workforce.

In addition, the ability of organizations to adapt their strategy and implement it quickly is a cornerstone of robustness. This is especially relevant in today's uncertain environment, where resources may need to be reallocated at short notice.

#### **Ecosystems & Networks**

A strong position within an ecosystem helps companies to anticipate future changes, allowing them to seize opportunities and leverage capabilities. It also ensures they can be proactive in setting trends and influencing standards. This means companies must, for example, develop their ability to deal with extended value and supply chains, and secure customer voice and proximity. Ecosystems, with their partnership networks and innovation hubs, also boost value proposition and help to build knowledge, talent, and access to resources.

#### **Process & Organizational Dynamics**

During times of change, companies need clear rules to adapt their structural setup to the needs of the moment. Strong support and business-platform functions are particularly important.

Robust companies optimize their way of working by ensuring resource flexibility, quick decision-making processes and responsiveness to change. They engage in fluid, project-based work using agile teams shaped around the required competencies and tasks, and typically employ rapid-cycle processes. This encourages innovation and entrepreneurship.

#### **Leadership & Talent**

Strong and inspiring leadership is critical for driving change and innovation, as well as navigating crises. Good business intelligence helps leaders make good decisions. Equally, robust organizations must be able to find and retain talent, especially as employee needs become more demanding. Talented staff want more responsibility and career choices, and to be deployed according to their skills. Providing such opportunities improves motivation.

#### **Technology & Data**

Technology will always be a driver of business development. This makes it a clear focus area, as mastery of data, digitalization, and efficient data sharing are essential for anticipating and driving growth.

This is challenging as the amount of data is growing exponentially every year. Robust organizations therefore need effective, data-enabled business models and scalable IT systems.

#### **Financing & Investments**

Companies must be able to pay the bills and maintain sufficient leeway to operate during times of disruption. Short-term liquidity buffers and the ability to rapidly allocate financial resources enable organizations to protect their core business and exploit opportunities, such as mergers and acquisitions.

#### ABILITY TO REACT AND ADAPT

Assessing a company from each of the six perspectives makes it possible to build a strong core for the organization – the key to longevity and growth. But robustness also implies the ability to adapt, develop, and evolve in line with a shifting environment. For companies, this means being able to 1) react in the short term and 2) adapt in the medium to long term, in every dimension.

1. The ability to react in the short term secures organizations against unexpected shocks or events. It also protects the company's business while at the same time enabling it to quickly grasp opportunities and reshape its priorities. This relates mainly to the Processes & Organizational Dynamics, Technology & Data, and Financing & Investments dimensions. If a company is able to master these, short-term robustness is more easily achievable.

Robustness implies the ability to adapt, develop, and evolve in line with a shifting environment. 2. The ability to adapt in medium to long term depends on the company's long-term purpose and vision, and how it explores opportunities and evolves dynamically over time. This relates mainly to strong abilities in the Purpose, Culture & Strategy, Leadership & Talent, and Ecosystems & Networks dimensions.

Suppliers in different vehicle domains will have diverging priorities when it comes to their ability to react in the short term and adapt in the medium to long term. How important the two abilities are will depend on the business models and dynamics of the domain. It will also be shaped by the competitive environment and the maturity of other stakeholders.

#### THE FIVE ARCHETYPES

After assessing the six core dimensions and the ability to react and adapt of many clients, we defined five archetypes of robust organization.  $\rightarrow \underline{C}$ 

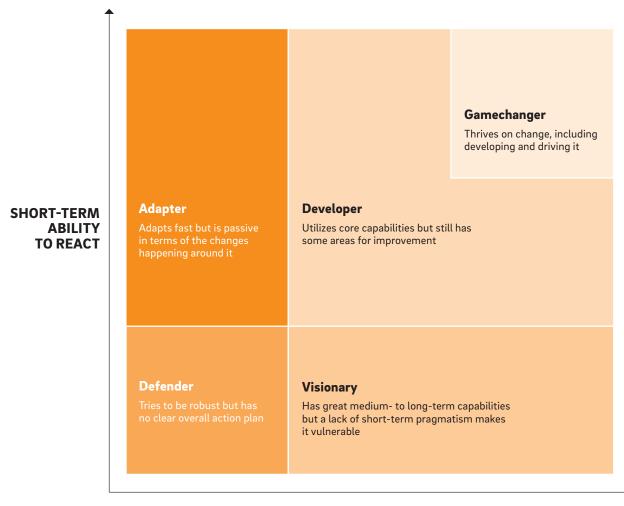
These are graded according to their level of maturity and can be mapped based on a company's ability to react and adapt:

**Defenders** have multiple areas for improvement with regard to their short-term ability to react and their medium- to long-term ability to adapt. They strive to be robust but are still somewhat passive, lacking an overall action plan. Among automotive suppliers, Defenders try to remain competitive and change their operating model only on an ad hoc basis in order to respond to current challenges.

Adapters are great at reacting in the short term. However, they often lack medium- to long-term vision. As a result, they can be rather passive, simply reacting to the changes taking place around them rather than proactively trying to shape those changes. With regard

#### **C:** Framework evaluation

A company's archetype is determined by its ability to react and adapt



**MEDIUM- TO LONG-TERM ABILITY TO EVOLVE** 

Source: Roland Berger

to automotive suppliers, this applies to companies that have comprehensive processes and a technological backbone in place that allows them to navigate short-term challenges, for example thanks to clear responsibilities and effective data monitoring.

Visionaries have a strong medium- to long-term ability to adapt, focusing on ensuring a great company culture, strong leadership, and other elements typical of future-oriented organizations. However, their vulnerability lies in their lack of short-term pragmatism. For automotive suppliers, this could result in short-term challenges and mean they potentially lack the ability to react if affected by events outside the existing strategic vision. This is particularly the case at the moment, where immediate external factors such as Russia's invasion of Ukraine require an ad hoc shift from the initial strategic path.

**Developers** are on track to become fully robust. Overall, they have the necessary core ability to react in the short term and adapt in the medium to long term. However, a few areas for potential improvement remain. If they tackle these, they could become Gamechangers...

Gamechangers have an excellent ability to react in the short term and adapt in the medium to long term. They thrive on change, actively developing and driving the direction of change as much as they react to it. In the case of automotive suppliers, Gamechangers are able to introduce long-term changes to the operating model due to a sound financing and investment situation. Strong organizational structures and processes allow Gamechangers to also react in times of rapid market changes (such as pandemic effects, supply chain issues, etc.).

So, how does the automotive supplier industry perform against the RO framework? In the next chapter, we use it to evaluate dozens of automotive suppliers and detail real-life examples.

Strong organizational structures and processes allow Gamechangers to also react in times of rapid market changes (such as pandemic effects, supply chain issues, etc.)

3

How automotive suppliers
perform / Current robustness
levels, strengths, weaknesses, and
success stories

o get a picture of the current status of the automotive supplier industry, we assessed more than 35 automotive organizations (both OEMs and suppliers) against the RO framework. Below we present the findings and consider the main strengths and weaknesses of automotive companies by dimension, including real-life best-practice examples. → D

#### Strengths, weaknesses, best practice

The RO framework survey findings highlight both strengths and weaknesses in the automotive supplier industry. These are best shown by categorizing them under the six dimensions of the RO framework, where they can be compared with other industries. We do this below, as well as outlining key focus areas for automotive suppliers in each dimension and giving a specific example of best practice. The automotive supplier group within the survey performs well in the Purpose, Culture & Strategy and Leadership & Talent dimensions, but less well in the other four.

#### **Purpose, Culture & Strategy**

A joint purpose and strong culture are particularly important for automotive suppliers. The industry is facing its most dramatic transformation in decades, requiring huge adjustments to the product and services portfolio while ensuring stable cashflows from existing products. Stability and high innovation levels can best be maintained if both the old and new parts of the business share a joint purpose. Without one, internal rivalries could severely damage the firm or at least slow it down compared to more purposeful competitors. Compared to other industries, especially to production-oriented industries such as capital goods/machinery, automotive suppliers have made progress in this dimension. But they have not yet reached the required level. For example, purpose statements are neither common nor linked to the company's strategy.

#### **SURVEY FINDINGS**

The majority of automotive suppliers already perform at a good level and were classified as either Developer or Gamechanger archetypes – Still some white spots visible.

Defender: 6%, Adapter: 0%, Visionary: 6%, Gamechanger: 31%, Developer: 57%

Mapping the automotive players produced a scattered picture of the industry.  $\rightarrow \underline{D}$ 

In addition, our survey results show that a strong focus on culture is still lacking.

**Example:** A French Tier-1 supplier has harnessed its strong culture to support innovation and growth by combining aspects of cutting-edge innovation and operational excellence. While not explicitly defined, a joint purpose of delivering outstanding cost efficiency and the best technology can be felt in all parts of the organization. Management regularly challenge the status quo of their products and check for further cost cutting potential, and do the same to their overhead structures. At the same time, the supplier readily channels financial and human resources to new projects - around 1,000 employees are deployed for long-term innovation topics - and is willing to spend substantially on research and development. This is leading to one of the lowest SG&A ratios among all Tier-1 suppliers, while the company still manages to have a motivated workforce willing to go to great lengths to satisfy customers.

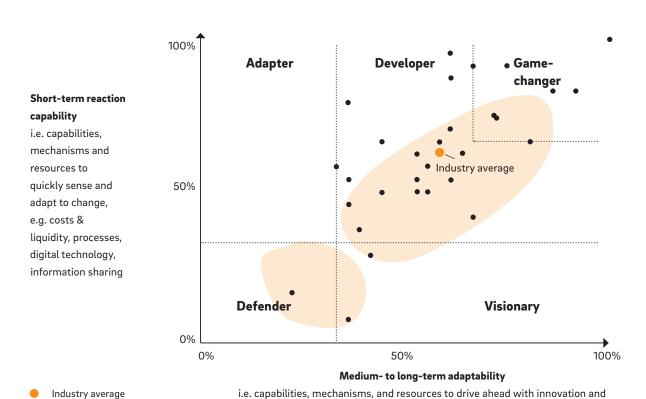
#### **Leadership & Talent**

Robust automotive suppliers need to display strong leadership based on sound decision making, a bold vision, and action-driven, empowered employees. This requires high employee satisfaction and engagement, as well as appropriate employer branding. In addition, effective mechanisms need to be in place to track and monitor leadership. Automotive suppliers are already showing strong results in this area.

Our survey shows that leadership is a strength among automotive suppliers. This contrasts with other industries, where the dimension is generally one of the weakest. Incentive mechanisms, for example, are often already in place, not only for top management but also

#### D: Survey findings

Automotive results: The majority of surveyed companies were classified as Developer or Gamechanger archetypes



business development, building your company towards growth and new business

Source: Roland Berger

Automotive organizations

the middle and lower tiers. In addition, as a result of the new competency requirements in the industry (software, new technologies, etc.), automotive suppliers have started to strengthen their efforts to identify employees' individual skills and develop them.

Example: A German powertrain supplier with a global footprint has developed a leadership program to equip its managers with the skills to think and act in complex and uncertain environments. The philosophy is tailored to today's challenges, such as digital transformation and globalization, and enables staff to adapt to rapid changes by balancing stability and agility. This allows the company to specifically implement desired behaviors into the organization through its leaders.

#### **Financing & Investment**

For automotive suppliers, liquidity is the key challenge here, with three main factors limiting their financial abilities. First, the electric vehicle and software revolutions are transforming the industry. This is leading to massive CAPEX and R&D spending to keep pace with rivals and build up in-house software competencies. The traditional business must also be restructured. Second, CAPEX requirements are increasing due to the push for sustainability, for example tighter  ${\rm CO_2}$  emissions rules. Third, the current financing environment is difficult for traditional suppliers. Their pension provisions are growing, the flow of market capital is shifting towards their startup rivals, and lenders are increasingly shying away from legacy technologies.

Across all industries, Financing & Investment is the second weakest robust organization dimension, after Leadership & Talent. Automotive suppliers are no different. Despite the fact that they are used to high investment costs, liquidity management and balanced cost management remain key areas for improvement. Nevertheless, some

positive examples are visible where automotive suppliers have worked on creating an inspiring environment for new business ideas and projects.

Automotive suppliers have started to strengthen their efforts to identify employees' individual skills and develop them. **Example:** A large European automotive supplier of powertrain components has recently created an internal "startup organization" in order to introduce new products or services at higher speeds (admittedly, from a relatively low base). This concept includes three different elements that make it a role model across the industry. First, the unit acts as an incubator for new business ideas that can be raised and further developed by employees from all departments, regions, and backgrounds. Second, it includes a strong partnership model with external startups or other companies to facilitate, exchange, and push (disruptive) business models. Third, an in-house venture capital department allows the automotive supplier to invest the capital required for promising ideas.

Few other industries need to be as close to customers to achieve minimal time to market while simultaneously sharing knowledge across divisions to provide a "system offering" to customers.

#### **Process & Organizational Dynamics**

The key characteristics of high-performance organizational structures include autonomy for business proximity while fostering collaboration and knowledge sharing. This is particularly true for automotive suppliers: few other industries need to be as close to customers to achieve minimal time to market while simultaneously sharing knowledge across divisions to provide a "system offering" to customers. Ensuring knowledge sharing is targeted at the right parts of the firm, while shielding others, is the most promising approach.

However, while automotive suppliers are usually well known for process efficiency, they lag behind in terms of end-to-end process coverage and cross-functional sharing within the organization. Our survey reveals improvement potential in best-practice and knowledge sharing, as well as dynamic decision making to keep up with the growing pace of change in the automotive industry.

**Example:** A major German Tier-1 supplier reorganized its corporate structure to align with its market-oriented strategy, which places a stronger focus on software development. It now emphasizes competence bundling and high structural standardization to increase efficiency and reduce complexity, while sharing knowledge – particularly in high-innovation future-oriented product areas. The reduction in complexity also helps to foster collaboration.

#### **Ecosystems & Networks**

New automotive supplier business models are still being established, with the best customer solutions often yet to emerge. Developing them all in-house will challenge even suppliers with deep pockets. Embedding the company in an ecosystem provides the flexibility in value and supply chain partnerships to fast-forward development processes and establish it as a relevant player in new

markets. Ecosystems and networks also help to integrate customer views into new products and services beyond the traditional OEM/supplier communication channels. This dimension represents relatively new territory for automotive suppliers, but their development of partnerships and industry networks is already visible. This is demonstrated by their increasing interaction within the whole automotive ecosystem, not just among OEMs or suppliers. However, automotive suppliers do not yet perform on a reference level in terms of ecosystems and networks, rather they have just started to derive learnings from other sectors.

**Example:** Since the phenomenon is relatively new for auto suppliers, looking at best practices from other industries is helpful. A major Danish manufacturer of toys leverages the creativity of its customers through a proprietary online platform. The website allows community members to share their designs and pictures, and if their idea gains enough support from other members, it is transferred to the design department. If the product is eventually put on the market, the idea initiator receives monetary compensation. While this may seem far-fetched for most car components, there are possibilities. For example, customers could vote on their preferred steering wheel design for a next-generation vehicle, giving the supplier strong marketing data to convince an OEM of their product's appeal.

#### **Technology & Data**

As in all industries, robust automotive companies set clear digitalization goals, adopt a focused digitalization strategy and integrate the strategy into their organization. They also integrate modular IT systems that best fit business needs, allowing flexibility and scalability. Furthermore, they can develop profit-generating data use cases by efficiently preparing, processing, and sharing data.

According to our survey, IT infrastructure and digitalization are key areas requiring attention among automotive suppliers. A common finding was that IT systems often did not match technology standards. However, many companies have already spotted this weakness and have started to address it, as evidenced by the current high level of IT system transformation in the industry.

Example: A leading US supplier of drivetrain components has developed a compensation (pay) platform that enables the company to hire and retain the talent needed to accelerate innovation. It uses increased data analytics and reporting possibilities to facilitate better centralization, visualization, and use of data. This ensures more informed and faster decisions, as well as allowing for more transparent and fair wages.

4

What to do next / The benefits of a robust organization — and how to get started

Il industries can benefit from an improved level of robustness, and the automotive supplier industry is no different. But what exactly are the benefits, and how can they be realized? In this chapter we look at both.

#### **KEY BENEFITS**

The core benefit of a robust supplier organization can be summed up thus: A flexible, agile, and resilient structure to master the challenges of the current and future automotive industry. But as noted before, a perfect operating model per se does not exist. Instead, it must be tailored towards the underlying business model.

So, in the case of automotive suppliers with a business model expected to be stable throughout the industry transformation (suppliers of structural automotive parts, paint, tires, etc.), key benefits of a robust organization are that:

- It leverages efficiencies. With cost pressures
  remaining a key concern for automotive suppliers,
  robust organizations can benefit from lean
  interfaces, as well as accelerated processes.
  In cases of limited business model change, in
  particular, efficiencies can create the cutting edge in
  competitive advantage.
- It creates stability. Consistent and robust operations allow automotive suppliers with a stable business model to focus on their core business. A consistently applied "fail-safe" approach leads to a stable environment and limited interferences in operations.

In the case of a complete change in a supplier's business model (for example, suppliers of cylinder heads, engine blocks, combustion engine electronics, etc.), flexibility, innovation, and speed are the key differentiating elements. Thus, key benefits of a robust organization are:

- It improves flexibility. The product portfolio can be adapted to match changing customer requirements and to openly interact with the entire automotive ecosystem, allowing for new partnerships along the value chain.
- It increases innovation. With this comes the ability to adapt to new technologies (for example, electrification, autonomous driving, software) and lead the way with new solutions.
- It results in faster process speeds. Prompt decision making and designation of responsibility are key to success in today's automotive industry and enable differentiation. Robustness helps to overcome stagnation and shorten processes.

#### **GETTING STARTED**

We suggest a three-step approach to get your organization's robustness journey started: A status quo assessment, a target definition, and development of a detailed concept.

A comprehensive status quo assessment includes a thorough analysis of the current operating model. Where does your organization stand, given a defined business strategy? In the next step, the target state needs to be defined along the six given dimensions. Here, best practice examples help to navigate through the long list of opportunities and potential target picture elements. Finally, the concept must aim to close the gap between the target state and status quo, and result in a detailed roadmap for each of the selected dimensions.  $\rightarrow E$ 

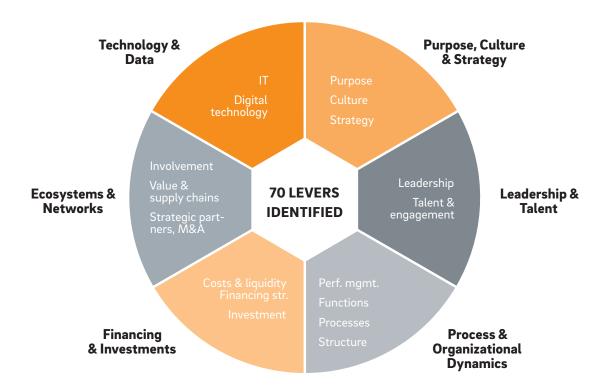
It is important to note that different suppliers will have different requirements. There is no one-size-fits-all solution as individual business models will have specific needs, and thus lead to customized and robust operating model focus areas. In addition, not all dimensions of our RO framework should be tackled at the same

time. Instead, priorities should be set for the particular automotive supplier organization.

To help your company achieve robustness, Roland Berger offers a proven toolbox of solutions. Our RO framework provides a quick check of robustness for automotive suppliers, supporting the status quo assessment and giving examples of best practices for each dimension. The assessment can be used as the basis for an in-depth review of a company's current level of robustness and definition of a target ambition, followed by the development of a full action plan.

#### E: Robustness radar

Six dimensions make a company robust, from Purpose, Culture & Strategy to Technology & Data



Source: Roland Berger

#### CREDITS AND COPYRIGHT

#### **AUTHORS**

INA WIETHEGER Senior Partner +49 69 29924-6191 ina.wietheger@rolandberger.com

FELIX MOGGE Senior Partner +49 89 9230-8346 felix.mogge@rolandberger.com

#### FLORIAN DEICHMUELLER

Partner +49 30 39927-3595 florian.deichmueller@rolandberger.com

VERENA KOCH Senior Project Manager +49 89 9230-8360 verena.koch@rolandberger.com

We welcome your questions, comments and suggestions

#### WWW.ROLANDBERGER.COM

07.2022

This publication has been prepared for general guidance only. The reader should not act according to any information provided in this publication without receiving specific professional advice. Roland Berger GmbH shall not be liable for any damages resulting from any use of the information contained in the publication.

© 2022 ROLAND BERGER GMBH. ALL RIGHTS RESERVED.

ROLAND BERGER is the only management consultancy of European heritage with a strong international footprint. As an independent firm, solely owned by our Partners, we operate 50 offices in all major markets. Our 2400 employees offer a unique combination of an analytical approach and an empathic attitude. Driven by our values of entrepreneurship, excellence and empathy, we at Roland Berger are convinced that the world needs a new sustainable paradigm that takes the entire value cycle into account and enables us to meet the profound challenges of today and tomorrow.

PUBLISHER:
ROLAND BERGER GMBH
Sederanger 1
80538 Munich
Germany
+49 89 9230-0