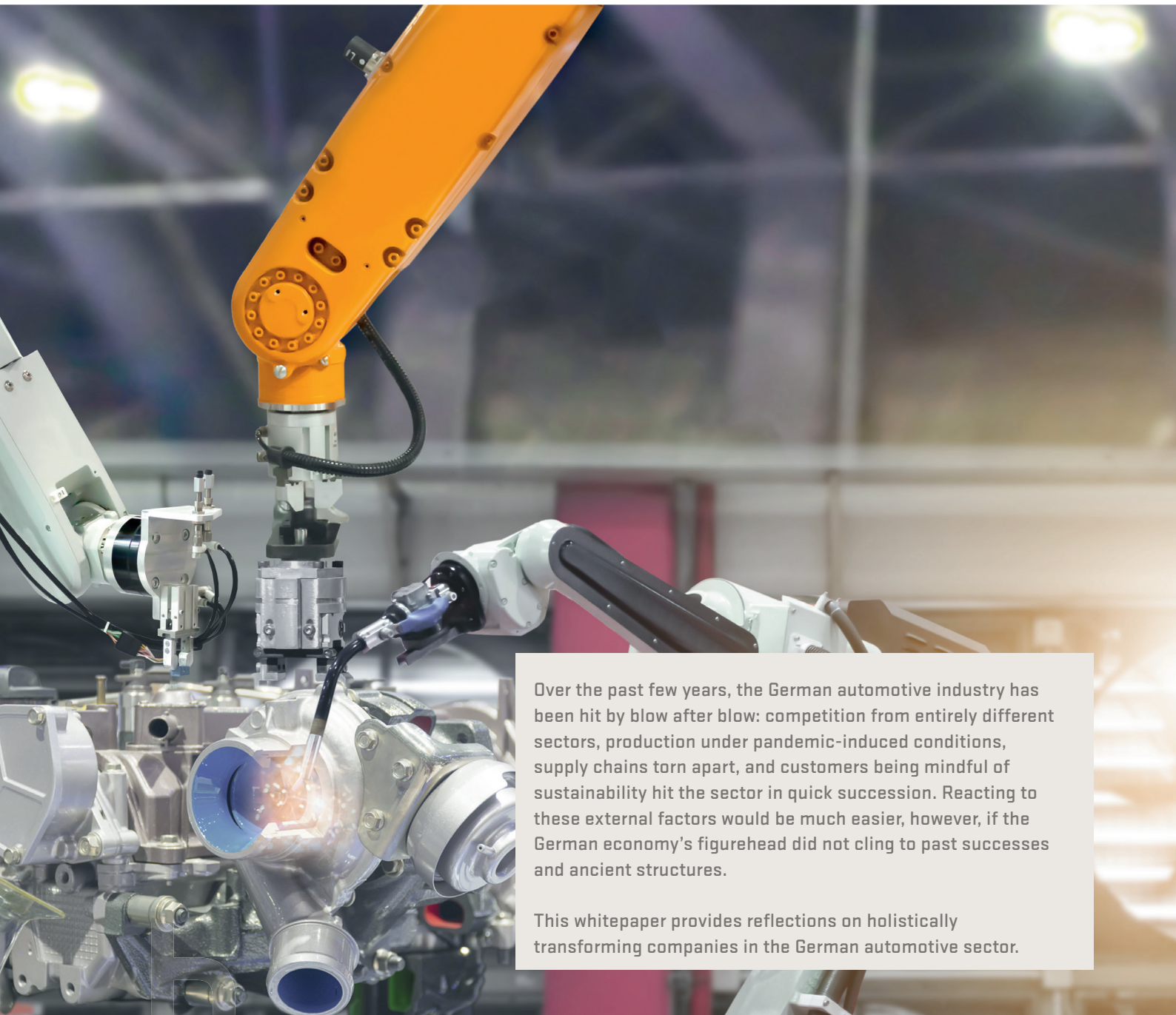# BACK TO THE FOREFRONT: WHAT THE GERMAN AUTOMOTIVE INDUSTRY IS SUFFERING FROM—AND HOW IT CAN HEAL

BY LENA JESSEN AND CHRISTOPH SCHMIEDINGER

Over the past few years, the German automotive industry has been hit by blow after blow: competition from entirely different sectors, production under pandemic-induced conditions, supply chains torn apart, and customers being mindful of sustainability hit the sector in quick succession. Reacting to these external factors would be much easier, however, if the German economy's figurehead did not cling to past successes and ancient structures.

This whitepaper provides reflections on holistically transforming companies in the German automotive sector.

HAS THE DREAM COME TO AN END?

For decades, the German automotive industry was a trendsetter and a role model, contributing significantly to the success of both the German and the European economies. Employees were proud to be a part of these companies and such growth. Today, however, the industry faces its largest challenges in decades:

1) **Climate change** is forcing a shift towards alternative drive systems, which requires fundamental rethinking across the entire product portfolio. Many companies need to reinvent themselves first and develop skills in the field of alternative drive systems.
2) The **complexity** of solutions is increasing. A wide range of scientific disciplines need to be combined (autonomous driving being merely the most well-known of numerous examples) to satisfy clients.
2) As this **completely** reshuffles the pack, new and innovative competitors are constantly entering the market. These companies stem from a large variety of sectors—large tech players from the US and Asia as well as start-ups that focus on niche products.
4) R**esources** are scarce and there are major supply-chain bottlenecks. These problems have been exacerbated by the pandemic and geopolitical conflicts which will not be completely resolved over the coming years.
5) Finally, **clients** are redefining mobility for their own purposes. In comparison with other available mobility services, a car's importance is continuously decreasing.

These realizations are not new; they have long since dawned on German automotive companies. However, the sector continues to repeat the same mistakes: they tend to look at the problems individually and "solve" them through local optimization—thus only masking them in reality. Since the beginning of 2020, the pandemic, and later the war in Ukraine, have brought home the fact that the sector was ill prepared. After almost three years of severe crisis, the attitude prevails that the German automotive industry is right at the forefront.

Yet, if the German automotive industry wants to remain one of the leading players, a lot will have to change.

1. First of all, the sector will have to **acknowledge** that it is no longer an invincible benchmark, but that it is being overtaken from all angles. This is the first step towards getting back into the fast lane.

2. **The system should finally be considered in a holistic manner** in order to pave the way for real transformation which brings sustainable solutions.

3. Of course, this will not be possible without **investments**. They are absolutely essential if the sector wants to remain a key player instead of being sidelined—and this does not refer to investments in consulting companies. Instead, education and training of employees, simplified access to information, and easy-to-handle systems should be the focus of investments. The time that will need to be invested into change should not be underestimated either.

4. It will only work with **courage, by taking the first step**, striking a new path, and leaving the beaten track behind.

5. This will be easier knowing that agile ways of working are not a magic bullet, but that they recast **simplicity** back upon decisions, communication, and the flow of information.

In this whitepaper, we will provide starting points for holistically transforming companies in the automotive industry, regardless of whether they are suppliers or OEM companies. We will address the systematic restructuring of companies based upon value streams, the introduction of modern ways of working, and radical stripping of bureaucracy that will make work efficient and exciting again for employees. Besides the advantages, we will also talk about possible pitfalls and necessary investments.

We want to emphasize that it does not always have to be a "big bang" right away. Small steps can result in enormous value and are key drivers for change.

FOCUSING ON WHAT CAN BE CHANGED

The environmental and external factors that are currently prevalent are perceived as being a massive threat. Both manufacturers and suppliers are in a sort of fight-or-flight mode and are having trouble leaving it behind. This is hardly surprising, as nobody within the sector can really influence these factors right now.

However, it is always possible to focus on those factors that lie within a company's own sphere of influence and action. Even before one crisis after the next hit the German economy, the automotive industry had faced very specific problems that it liked to turn a blind eye to. These issues had been pressing enough without the crisis; but they need to be addressed now if the desired result is a fractal scaling of organizations to support cross-functional, high-performing, dynamic teams that deliver well. When, if not now, will it be the right time to finally admit that these challenges exist?

❯ Not only in software development, but also in hardware development, requirements become increasingly volatile. This undermines the stability of interface definitions and makes it extremely difficult to adhere to them.

❯ **Product development lead times** are too long, especially in the supply of components or the validation and testing of product modules or product parts.

❯ Vast and document-intensive **regulatory requirements**, such as A-SPICE or ISO, hold back product development at a very early stage and provide very little leeway to implement change.

❯ What is lacking is a holistic perspective on the **entire value chain**, from the supply of raw materials through to the end customers, with end-to-end responsibility within product creation and the supporting departments.

❯ There are often **unclear interfaces and heavy dependencies**, both between players within the sector and with customers and neighboring industries.

❯ These interface problems are often characterized by **insecurities concerning the stakeholders** and decision-makers **involved**. It is unclear how they should be included.

❯ Finally, the automotive industry likes to cling to its **hierarchical leadership structures** and a deficit-oriented understanding of leadership.

CHANGE MEANS TEAMWORK

Considering these multi-dimensional problems, how and where should change be initiated? Everything is put to the test: business models, structures, ways of working, governance, culture, leadership. If you pull one thread, countless other elements will follow suit. In such a situation, the very first thing you need is an overview of the strategic initiatives that are currently being implemented within the company. All too often, several initiatives are pushed through the organization in parallel, with very little to no exchange at all. As a result, none of these initiatives reach their full potential. This needs to stop! What is actually needed is consistent transparency, strategic focus, reliable prioritization, and a transparent flow of information and decisions.

In our experience, it is advantageous to have a central team—which we call the **"transformation team"**—organize these first steps of change. New wine in old wineskins? Only if your organization already has such a team. This team does not plan change on a drawing board, and it does not plan all steps and rollouts for years to come either. The transformation team starts change in the here and now, by implementing many small steps—none of which are perfect, but they are good enough to create real leverage and, most of all, continuous and positive momentum within the organization. Change can (and should) also be delivered iteratively and in increments.

Practical tip: transformation owner

A transformation team works according to agile principles, which means that it needs a person who drives the "product": change. A transformation owner has the power of imagination to visualize what the organization could look like in the future. For the task of "guardian of change", the transformation owner needs a certain standing among their colleagues and management, networking skills, and most of all courage, for they will continuously work to break down barriers. Change is always a little painful, which is why the transformation owner is transparent about it and communicates openly.

In principle, there are five steps that will lead to a real change of mindset within a company:

1. Examination of the status quo
2. Management kick-off
3. Designing a framework for new collaboration
4. Testing the framework in a pilot project
5. Rolling adoption

These five steps do not necessarily have to be completed in this order; they can also be started and dealt with in parallel. In fact, this would even be a better approach, as this is the only way that change can accelerate and you will receive continuous feedback throughout the process.

What is more "difficult" is the systematic implementation of conditions and paradigms that are necessary for overcoming the existing challenges. This even works in traditional, hierarchically led companies as well as matrix organizations, though; it just might take a little longer.
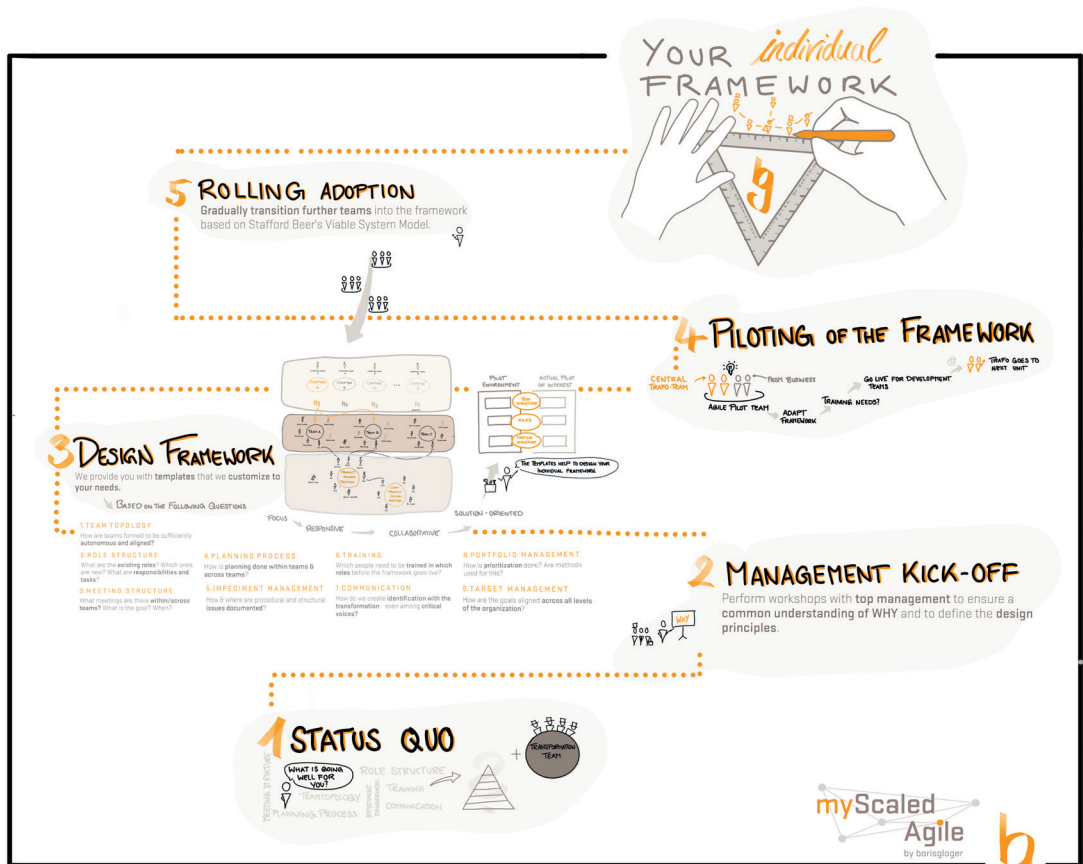
STEP 1: EXAMINING THE STATUS QUO

First and foremost, the transformation team will try to answer two main questions:
1. Where does our organization stand?
2. How can we convince top management and decision-makers that change is necessary?

Examining the status quo will provide insight into the following crucial issues: is there any willingness to change at all? How many interfaces and dependencies exist within the organization? How are communication, decision-making, and the flow of information structured? This information is gathered using various strategies: individual and group interviews, online surveys, reflection sessions, observation, and participation in meetings. Employees from different organizational areas and hierarchical levels are surveyed. Gaining such an overview is important in establishing where change needs to start. Initiating a "big bang" is not the solution here; rather, the solution consists of the many small steps and trying new things.

Practical tip: listen closely

Employees know exactly what works and what does not. When examining the status quo, you should therefore ask open questions, let the interviewees talk, listen actively, and, if necessary, offer to have a more in-depth, personal discussion. Do not hesitate to ask uncomfortable questions, as the answers you get will reveal the company's true potential for change.
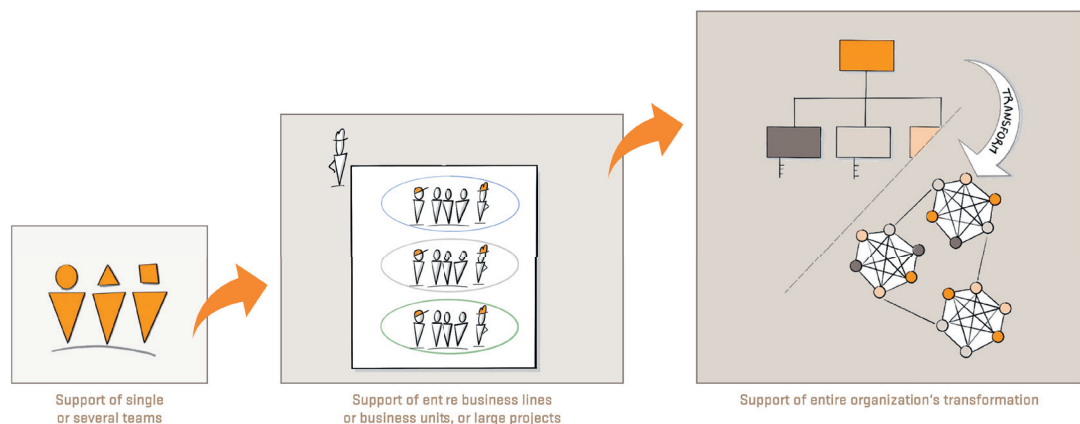
STEP 2: MANAGEMENT KICK-OFF

While the status quo is being analyzed, the transformation team starts accompanying top management in the company's transformation. It has proven useful to implement workshops and working sessions at the beginning which focus on defining why the organization wants to change, what direction it wishes to take, and what it aims to achieve. Top management's commitment is indispensable in sending the right signals to employees.

Get all the decision-makers together, but also pay close attention to those who actually want to bring about change and those who who only want to talk. Many leaders will want to be involved in the discussions and it is certainly important to involve all the relevant stakeholders. In practice, it has proven valuable to work closely with a rather small group of decision-makers, and inform other stakeholders, but not necessarily involve them in decision-making processes.

Top management especially needs to work on adopting the perspective that this transformation is both a bottom-up and a top-down approach and that one cannot work without the other. Real change can only ensue if ways of working and mindsets are altered, both in development teams and among executives. It is up to you to decide how radical a change you want for your organization—different approaches all have their individual advantages and disadvantages: you can try out new working approaches in individual teams, in entire business units, or in the entire organization.

Our recommendation: start in a business unit or a part of it (e.g., in a business line). Subsystems of slightly more than 50 employees are usually big enough to produce relevant results for the organization and small enough to avoid turning the company upside down overnight and overwhelm everyone.

Support of single or several teams

Support of entire business lines or business units, or large projects

Support of entire organization's transformation

Practical tip: communication

As soon as it is clear "why" change is being implemented, the transformation team, together with important stakeholders and/or drivers of change, can explain to employees why collaborative change is sought and why it is useful—for example in a video message. This creates a commitment, especially in a company used to acting in a hierarchical manner.

STEPS 3 AND 4: DESIGNING AND TESTING A FRAMEWORK

As soon as the basis has been formed, the transformation team can start its comprehensive work. According to our experience, there are certain sector-independent topics that tend to come up in transformation processes, for example career steps for new roles such as product owners, scrum masters, and agile masters. At the same time, there are sector-specific topics that need to be dealt with. In the automotive industry, for example, the transformation teams regularly encounter the following key issues:

❯ Aligning the structure to reflect the creation of value
❯ Adjusting the way in which products are developed (product development process, PDP)
❯ Stripping control processes of bureaucracy (budgeting, resource management, portfolio management, etc.)
❯ Developing a new understanding of leadership

Aligning the structure to reflect the creation of value

A company's "why" heavily influences the way it creates value, both in the present and in the future. Why does the company exist? How does the company create value? And who should be interested in this and why? In principle, there are three useful control parameters that provide orientation for a company's creation of value.
➤ Product (group)
➤ Customers
➤ Region

The orientation defines the company's strategy: if a company wants to be noticed for its qualities as a producer, the control parameter "product" would be most appropriate. If the customers' perception of the company as a competent partner for an entire product and solution portfolio takes center-stage, this is encompassed in the "customers" dimension. If the business is so highly diversified at the international level that every region needs an individual portfolio, orientation according to regions might be a sensible option. In large companies, it might also prove reasonable to implement a structure according to several control parameters—e.g., in the case of a multi-national supplier which is organized according to regions and, within the regions, according to customers.

Independent of the structure, it is important to clearly define how the value stream within these control parameters can be reflected in teams. Does the company need development teams that are responsible for products and solutions? Does it need predevelopment teams that develop technologies irrespective of their application in products and solutions? Would it make sense to have acquisition teams that are responsible for the entire work for one customer, thus offering this customer several products and solutions all in one?

The decisive element is to apply end-to-end responsibility for the product's entire life cycle to the entire value chain: from the requirements analysis and solution designing, to development, testing, roll-out, and active operation, through to the phase-out of a product. This often entails a redefinition of team compositions: cross-functional teams made up of mechanics, mechatronic engineers, materials scientists, software developers, etc. bring together the skills that are needed from a product's conception through to its implementation. The objective is for teams to be able to implement more themselves instead of having to wait for others. Fewer dependencies result in accelerated development. This automatically leads to a new form of product development.

Adjusting product development—an agile PDP

In the automotive sector, it is common to have development processes that adhere to the waterfall or V models. These very linear development models stem from a time during which the world was a lot less dynamic. Nowadays, many companies realize that freezing requirements years before production starts substantially reduces their ability to react flexibly to market developments.

The linear characteristics of the development process are not the only limitation, though. Many companies in the automotive sector have imposed a product development process (PDP) upon themselves which is by far more rigorous than the underlying development model. What is the reason for this? As there had sometimes been errors, the companies now try to systematically avoid errors by adhering to the process itself. In many cases, this has led to excessive process monsters. Hundreds of checklist or question items are unfortunately not uncommon.

How could this be dealt with differently? Realizing that a PDP can also be based on an agile, iterative process model is a good starting point. Even rigid process or functional-safety standards such as A-SPICE or ISO 26262 do not change this fact. Of course, these standards impose requirements on a development process—these requirements can equally be depicted in an agile and iterative approach, though. A modern PDP is characterized by being limited to the essentials in the first step: the definitions are only comprehensive enough to enable initial risk and safety analyses based upon rough requirements and a rough architecture. Following this, the product is developed in an iterative manner and the entire documentation mandated by the standards is included gradually. Prototypes, test setups, and simulations allow for inexpensive and fast-paced experimentation that leads to results early on. The preparation of industrialization starts at as late a stage as possible, as each change becomes really expensive at this point—e.g., if tools for the production line have already been ordered and manufactured.

Another advantage of a modern, iterative PDP is the ability to deliver products at an earlier stage—be it as a test setup, prototype, or real first version. As such, earlier integration becomes possible outside of company boundaries, thus minimizing interface risks.

Stripping control processes of bureaucracy

All too often, agile change is only introduced at the lower and product development levels. It is particularly the overlapping processes that can obstruct a company's efficiency, though, for example due to repeated coordination requirements before decisions are made, unrealistic planning of new orders, or excessive reporting.

A company can only gain speed if those people who have all the relevant information are allowed to decide quickly.[1] This starts in portfolio management: adhering to the principles of the Theory of Constraints can help minimize lead times for new orders and thus maximize throughput. This, however, also needs the resolute attitude to delay or even refuse certain projects when running at full capacity if it would otherwise mean delivering all orders with a delay.

Reporting can equally be reduced to the essentials: to a few hard facts that reflect the actual level of development. Sugar-coated, glossy presentations only waste the engineers' precious time. What is actually needed is the presentation of real results and transparent, honest discussions on the state of affairs. If management knows about the actual state of affairs, it can remove obstacles and thus accelerate processes.

This means not only allowing, but enabling, decision-making within the teams. For far too long, employees have been trained to take double and triple safeguards in every decision. As such, they supposedly do not assume any risk, but real innovation cannot be created either. It is therefore management's task to define the framework within which employees can make decisions. If employees hit this framework's boundaries in their decision-making, an analysis with stakeholders and management will have to be carried out: is the decision-making authority they seek quite simply impossible, or are any adjustments to the framework possible or necessary for a team to act in a free, independent manner? The transformation team should not lose sight of whether specific decisions have been made in this case. A state of uncertainty would hinder work and deliveries.

---

1   See Marquet, David L.: Turn the Ship Around! A True Story of Turning Followers into Leaders. Penguin 2015

Developing a new understanding of leadership

A company can work hard on the points raised—success, however, depends on whether leadership changes too. Change always begins with yourself: if you want to change the system that you are responsible for, you are well-advised to work on changing yourself. It can be a daunting task to place greater emphasis on human aspects in a culture of engineers.

Leadership success largely depends on focusing on the values and principles that you have proclaimed. Contradictory behavior is the single most harmful thing for management. Naturally, it is difficult for everyone to break through years of patterns and learn new ones. Being honest with yourself can help; for example, in self-reflection or together with a coach.

Representing something also means having visions and goals, and making employees enthusiastic about joining in. This also includes extending invitations: right now, there is scarcely another sector in which an entire industry and philosophy of life needs to be questioned and reinvented to such a large extent. The present time offers the opportunity to transform the world in a truthfully sustainable way. This is also reflected in the relationship between leaders and employees: "what do you expect from me as a leader and how can I get involved to the best possible degree within and for the team?" "How can I help you?" should really be one of the questions which employees are asked most. This might feel strange at first, as leaders are used to having all the answers. Restraining one's own ego to give other people room to develop and distinguish themselves is not a simple task—but it pays off for everyone involved.

Of course, there are many more aspects that constitute good leadership: authenticity, humility, and approachability, for example. Take the time to consider what you think makes a good leader and how you can come as close as possible to reflecting this. Do not put too much pressure on yourself in the process, though: changing one's behavior cannot be done at the push of a button. It is a long path that will take years.

> **How do you feel as a leader?**
>
> What are your current sticking points? What prevents you from generating value? What is your main issue as a leader? Or are you already on the road towards change, but currently stuck on something? Write it down right now. If you want, we can talk about it!

STEP 5: ROLLING ADOPTION IN THE ENTIRE ORGANIZATION

The pilot projects will show, at different stages, whether the model for collaboration is suitable or adaptations are necessary. As such, over time, a holistic perspective for restructuring and re-organizing a company will emerge. This is why our recommendation for a company-wide transformation is as follows: use other models for collaboration and communication where you want to make work easier. Do not exaggerate, though: only introduce change where it is reasonable, and ask colleagues, employees, and team members how they would like to work. The answer is often obvious.

IT DOES WORK, AFTER ALL

All the challenges, opportunities for change, and food for thought mentioned above also contain the approaches for solution and potential for optimization; these only need to be uncovered. Like we said: most people—in this case, your organization's employees—know exactly what does not work well and what they would like to change. How can you unearth this treasure?

Not the topic of mindset again

The treasure hunt starts with your own beliefs and how you behave based on your beliefs. Some would call this "mindset", as the list of buzzwords would be incomplete without this term. Mindset, getting employees "on board", ... these terms and phrases have been used so frequently that they have become almost meaningless. Of course, values and principles, how they are presented to the outside world, and how people behave are important factors. But please let us stop tinkering people and believe that they can be manipulated when seen fit to make them develop the "right" mindset. This should not be our goal. Either the organization creates a system that people like to work in and which gives them a sense of purpose, or leaders have quite simply not managed to be role models for change. In the latter case, however, the leaders should not be surprised with the people working for them.

Thinking and acting comprehensively

Comprehensive, large changes need the consent and commitment of everyone, both within and outside of the organization. If the German automotive industry wants to revolutionize, it will not be successful for as long as the car manufacturers dictate requirements to their suppliers and do not become the slightest bit more dynamic, flexible, or reactive themselves. Therefore, if we think about change, we need to consider the bigger picture, the entire sector—while still not losing sight of individual frameworks for every company that reflect each organization's reality. One-size-fits-all frameworks tend to result in annoyance.

Build-up and transfer of knowledge

Change means learning at every step along the way. This knowledge needs to be internalized and expanded both consistently and as quickly as possible. Get key departments on board, for example the HR department, the works council, and the communication and marketing departments. Change will also be reflected in employee reviews and work contracts; it needs to be communicated transparently, also to the outside world.

Transparency, transparency, transparency

What is true for many other sectors is still just as true for the automotive industry: knowledge is power. The thought of sharing knowledge not only within the company, but also between companies or even with organizations outside of one's own sector takes some getting used to. However, we can assure you that open exchange of experience will spare you numerous potholes on the road to change. Those responsible can also create transparency through their behavior. If you want change, if you want closer exchange with the industrial players upstream or downstream, if you want to be a role model in your organization, you had better not give blazing speeches, but convince others with your actions..

THREE TIPS FOR YOUR OWN CHANGE

Finally, we would like to offer three tips for promoting change at your company:

1. Stop complaining or pondering about factors that you cannot change. Focus exclusively on topics that you can decide upon and change yourself, or over which you have direct or indirect influence. Then think about simple, specific measures that can help you change factors outside your direct sphere of influence in small steps.

2. Why not think about the automotive industry in a completely new and different way? How can it go back to being the German industry's miracle? You have no idea? There are certainly many bright minds at your company, and even more of them outside of your company. How about getting together with people from companies in the entire value chain and establishing a think tank to examine the industry's challenges from a fresh perspective, free from constraints, structures, and requirements?

3. Try new things out. Try new forms of collaboration, a new organizational model, a new decision-making method—and start in a small-scale environment, in a pilot project. This enables you to find out whether this could work at your company without assuming any risks. Ask your teams what they are lacking and how they would like to work in order to be more efficient, more dynamic, and have more fun.

HOW CAN BORISGLOGER SUPPORT YOU?

Have you identified the need for change within your organization and do you want to take the first step? Have you already planned a transformation and are you unsure about how to implement it successfully? Or are you in the middle of a transformation and need fresh momentum?

We can help you to plan your transformation strategy and support your organization in implementing it at all levels. We lend a hand at every step along the way until your organization is able to continue on this path alone: from consulting for top management and the development of transformation strategies to operational work with agile teams. And even if your organization's transformation is currently experiencing difficulties: we are experienced in getting transformations back on track.

Do not hesitate to contact us. We consider trust to be an absolute prerequisite for a successful transformation. We are happy to join you for a non-committal first meeting to show you who we are, how we work, and what we can do for you.

We look forward to meeting you!

Your contact partners:

Lena Jeßen
Navigating strategy and implementation, Lena Jeßen creates clarity along the path leading to a goal. Based on her extensive leadership experience, she always strives for holistic change in an organization and also supports executives with coaching. Lena stands for directness and a "just do it" approach, and this is how she gets people to move. From her point of view, two things are especially important for the joint development of something new: one's own desire to learn and the ability to actively listen and ask questions. Not only does this enable open and honest communication, but also the return of simplicity to workflows and processes.

E-mail: lena.jessen@borisgloger.com

Christoph Schmiedinger
Christoph Schmiedinger supports automotive manufacturers and their suppliers in preparing their organizations for the challenges of the mobility revolution. As an experienced executive consultant and industrial engineer, he also provides hands-on support for the transformation from a traditional to an agile company. The native Austrian has been working with agile methods for over ten years. In particular, he has established expertise in agile transformations and large scaled projects as well as in the agile further development of physical products and safety-critical systems. He has also developed digitization strategies for major banks in Germany and Austria. He shares his knowledge in training, as a speaker at conferences, and in regular publications.

E-mail: christoph.schmiedinger@borisgloger.com